STATISTICAL YEARBOOK

OF THE ELECTRIC UTILITY INDUSTRY/1989

AVAILABLE IN FLOPPY DISK FORMAT

1990-1991
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Organized in 1933 and incorporated in 1970, EEI provides a principal forum where electric utility people exchange information on developments in their business, and maintain liaison between the industry and the Federal government. Its officers act as spokesmen for investor-owned electric utility companies on subjects of national interest.

Since 1933, EEI has been a strong, continuous stimulant to the art of making electricity. A basic objective is the "advancement in the public service of the art of producing, transmitting, and distributing electricity and the promotion of scientific research in such field." EEI ascertains factual information, data and statistics relating to the electric industry, and makes them available to member companies, the public, and government representatives.

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OF THE ELECTRIC UTILITY INDUSTRY/1989

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PUBLICATIONS PREPARED BY THE STATISTICS DEPARTMENT

Capacity and Generation of Non-Utility Sources of Energy.
Presents statistics compiled from electric utility reports and other sources for 1988 and a limited amount of historical data on capacity and electric generation of non-utility producers of energy (cogenerators, small power producers and other non-utility producers). The report contains national data on capacity and generation by year, type of producer and qualifying status; number and size of projects; electric utility receipts from non-utility producers from 1979 through 1988; yearly additions of capacity from 1980 through 1988; type of connection and dispatchability; prime mover; primary energy source; and major industry group. Published annually in the spring. 80p.

Catalogue of Investor-Owned Electric Utility Companies Operating in the United States.
Complete reference of investor-owned electric utility names, addresses and phone numbers, arranged on a state basis according to location of principal office. Holding companies and systems, and jointly-owned companies are cross-referenced with operating subsidiaries. Ranking of companies according to number of ultimate customers is presented. Published annually in the fall. 48p.

Digest of Electric Utility Financial Ratios.
Provides a method of calculation for the predominant ratios used by the industry in analyzing financial reports. Categories of ratios include Earnings and Return; Common Dividend; Coverages, Interest and Preferred Dividend; Balance Sheet; Revenue and Sales; Expense; Tax; Plant; Depreciation; other ratios, such as funds used during construction as percent of earnings and per share, capital expenditures, etc. Prepared by EEI Financial Ratios Subcommittee of the Statistical Committee. 31p.

EEI Pocketbook of Electric Utility Industry Statistics.
A pocket-sized quick reference of national electric utility industry data, some dating from the early 1900's. Categories include data on installed capacity, generation, capital and finance, sales, revenue, customers, fuels and private and public ownership. Published annually in late fall. 36p.

Electric Power Annual Report.
This report presents historical and projected data concerning the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment in the U.S. as of the end of the year. Power supply data including peak loads, capability to meet loads, kilowatthour requirements, load factors, and comparison between summer and winter seasons are shown on a total industry basis for each of the nine reliability councils and for total contiguous U.S. Also included are orders and shipment information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. electric power systems. Published annually in the fall. 40p.

Floppy Disk Version of EEI Statistical Yearbook.
Contains eighty-nine (89) LOTUS 1-2-3 files that print out as close approximations of the tables in the Statistical Yearbook. Filenames are in the form TABLEnn.WK1. Wherever possible, the same number of years have been included as in the printed version of the Statistical Yearbook. The LOTUS worksheet format facilitates easy extraction and manipulation of data series from the Yearbook tables without re-keying, as well as allowing the options of producing whole tables (or selected parts) in hard copy and LOTUS graphics. There are twenty-five table files on the first disk and thirty-two each on the second and third disks. In addition to a "README" file on the first disk, each floppy contains a FILEINFO.WK1 worksheet file with descriptions of each table's contents, the same data in FILEINFO.PRN form that can be "typed" to the PC screen, and a FILEINFO.COM program with paging, printing, and keyword-finding functions to manipulate the table titles. Available in the winter.

Glossary of Electric Utility Terms.
Defines the principal statistical reporting terms commonly used in the electric utility industry. Since the last revision in 1970, the Glossary has been expanded to include information and terms on Load Management/Rate Design, Nuclear Generation and additional terms on financial and general operations. Prepared by the EEI Glossary of Electric Terms Subcommittee of the Statistical Committee. 56p.

Guidelines for Defining & Classifying Electric Customers by Major Energy Use.
Provides guidelines within the electric utility industry for counting, classifying, and summarizing customers, categorizing sales and revenues by major energy use, and determining average use and average revenue per customer. The report contains definitions as well as the application of the definitions to specific situations and problem areas. Historically, the industry has based its classifications on rate schedules and it is probable that the recommendations in this report are unsuitable for rate analysis. However, the recommendations are offered as a basis for making a more significant market-oriented representation of sales statistics available to the industry, security analysts, and others with interest in electric utilities. 8p.

Post-Summer Electric Power Survey.
Reports results of a scheduled generating additions survey as of July 1, and a summer peak load survey as of September 15. There are listings of actual additions to generating capacity during the first half of the year and of those scheduled for the future.

Contains first actual regional capability, peak load, and percent capacity margin values for the summer season just completed. NERC's latest ten-year fuel projections are presented in terms of both regional generation from each energy source, and in physical units of coal, oil and gas to be burned for electric generation. Also includes information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. electric utility systems, orders and shipments during the first half and shipment backlogs as of July 1. Published early the next year. 40p.

Problems and Limitations of Intercompany Comparisons of Investor-Owned Electric Utilities.
Assists analysts and others who may wish to make industry-wide comparisons of investor-owned electric utilities. The report illustrates some of the main factors that can facilitate valid intercompany differences in performances. The Executive Summary briefly examines some of the more important factors that lead to performance differences between companies. The Discussion Section covers in greater detail many of the factors that can generate invalid and inaccurate comparisons. Prepared by EEI Problems and Limitations Subcommittee of the Statistical Committee. 51p.

Statistical Releases.
Yearly subscription includes: 1) Electric Output, issued weekly for nine geographic divisions and total U.S.; data for latest 52-week period and calendar year to date; latest quarterly data for installed capacity, generation, customers and sales 2) Quarterly Statistical Report, presents latest sources of electricity, including net generation, net imports of electricity, and net amounts available for distribution; customers, sales, and revenues by class of electric service; average use and revenue data 3) Advance Release, issued in summer, includes selected tables that appear later in Statistical Yearbook 4) Statistical Yearbook of the Electric Utility Industry.

Statistical Yearbook of the Electric Utility Industry.
Data compiled from company reports and other sources on operational and financial aspects of the total electric utility industry. Categories include national and state statistics on installed capacity; electric generation and supply; sales, revenue and customers by class of service; investor-owned data are presented for operating and related ratios; fuel use; financial; and general economics series. Prepared under the general guidance of the EEI Statistical Committee. Published annually in the fall. 101p.

Statistics, Non-Investor-Owned Electric Utilities.
Financial and operating data on government-owned (municipal, state/public power district and federal) and government-financed (cooperative) electric power systems. Tables present data on installed capacity, generation, customers, sales and revenues, in addition to selected financial data. This publication supersedes *Government Power* which was last published in 1985 and presented statistics for 1983. 40p.

Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry.
Fuel data are presented for the United States by state and Census Division, detailed by type of fuel (coal, oil, natural gas and nuclear) for both the Total Electric Utility Industry and the Investor-Owned segment. Heat rate, average Btu content, and cost of fuel per kilowatthour, per million Btu, and per unit consumed are shown for the most recent and four preceding years. Published annually in the fall. 75p.

Order card located in back of book.

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Scope and Coverage

This publication presents data on the electric utility industry, including generation, energy sales, customers and revenues, financial and economic. These data are collected and compiled from various sources as indicated on page 3. In all sections, except the Financial Section, data are presented for Investor-Owned Electric Utilities and the Total Electric Utility Industry. Dissimilarity between the investor-owned and the publicly-owned segments of the electric utility industry would make overall financial data incompatible even if it were available. Therefore, in the Financial Section, data are shown for Investor-Owned Electric Utilities only.

1989 in Review

The installed generating capacity of the electric utility industry at December 31, 1989 was 730,883 megawatts, an increase of 1.0 percent over December 31, 1988.

No. of units added during 1989

Hydro	Conventional Steam	Nuclear Steam	Internal Combustion
1	4	3	16

Statistics on capacity and generation from pumped storage are included in hydroelectric and those for gas turbine are included in conventional steam.

Comparison of the 1989 and 1988 total electric utility industry generation data shows the following:

- Generation of electricity in the United States increased approximately 2.8 percent.
- Generation by oil increased 6.3 percent and represented 5.7 percent of total generation.
- Generation by hydroelectric power increased 18.9 percent and natural gas production increased 4.8 percent. Hydroelectric power and natural gas each represented 9.5 percent of total generation.
- Generation by nuclear power plants increased 0.5 percent and represented 19.0 percent of total generation. Generation from coal-fired units increased 0.7 percent and represented 55.8 percent of total generation.

Electric output, representing the total amount of electricity available for distribution, was 2.6 percent higher in 1989 than in 1988. Mild weather conditions throughout the year prevented any record weekly highs.

Energy sales to ultimate customers totalled 2,616 billion kilowatthours, an increase of approximately 2.4 percent over the previous year. Total utility revenues from ultimate customers were $169.1 billion in 1989, an increase of 4.1 percent over the previous year. Revenues increased 3.3 percent and 5.0 percent from residential and commercial customers, respectively, and industrial revenues increased 4.3 percent.

The total number of ultimate customers at December 31, 1989 was 108,412,083. Approximately 88.2 percent of this total were residential customers. In 1989 residential customers increased 1.8 percent from 1988. In the last 10 years residential customers have increased 20.0 percent.

Total electric operating revenues for the investor-owned electric utilities increased 4.7 percent in 1989 to $140.9 billion. Contributing to the increase in revenues were the electricity sales growth and favorable economic conditions. Electric operating expenses increased $5.6 billion. The cost of fuel represented 41.9 percent of total operation and maintenance expenses, down from 42.4 percent in 1988. Electric operating income increased 2.5 percent to $29.5 billion. Despite the increase in operating income, earnings per share before Extraordinary Items and the Cumulative Effect of a change in accounting principle remained the same, $2.25. Retained earnings reached $52.4 billion, an 8.5 percent increase over the $48.3 billion recorded in 1988.

In 1989 electric plant construction expenditures for the investor-owned electric utilities increased to $24.8 billion (including nuclear fuel) from $23.6 billion in 1988. Of this 1989 total, $2.2 billion was the allowance for funds used during construction (AFUDC).

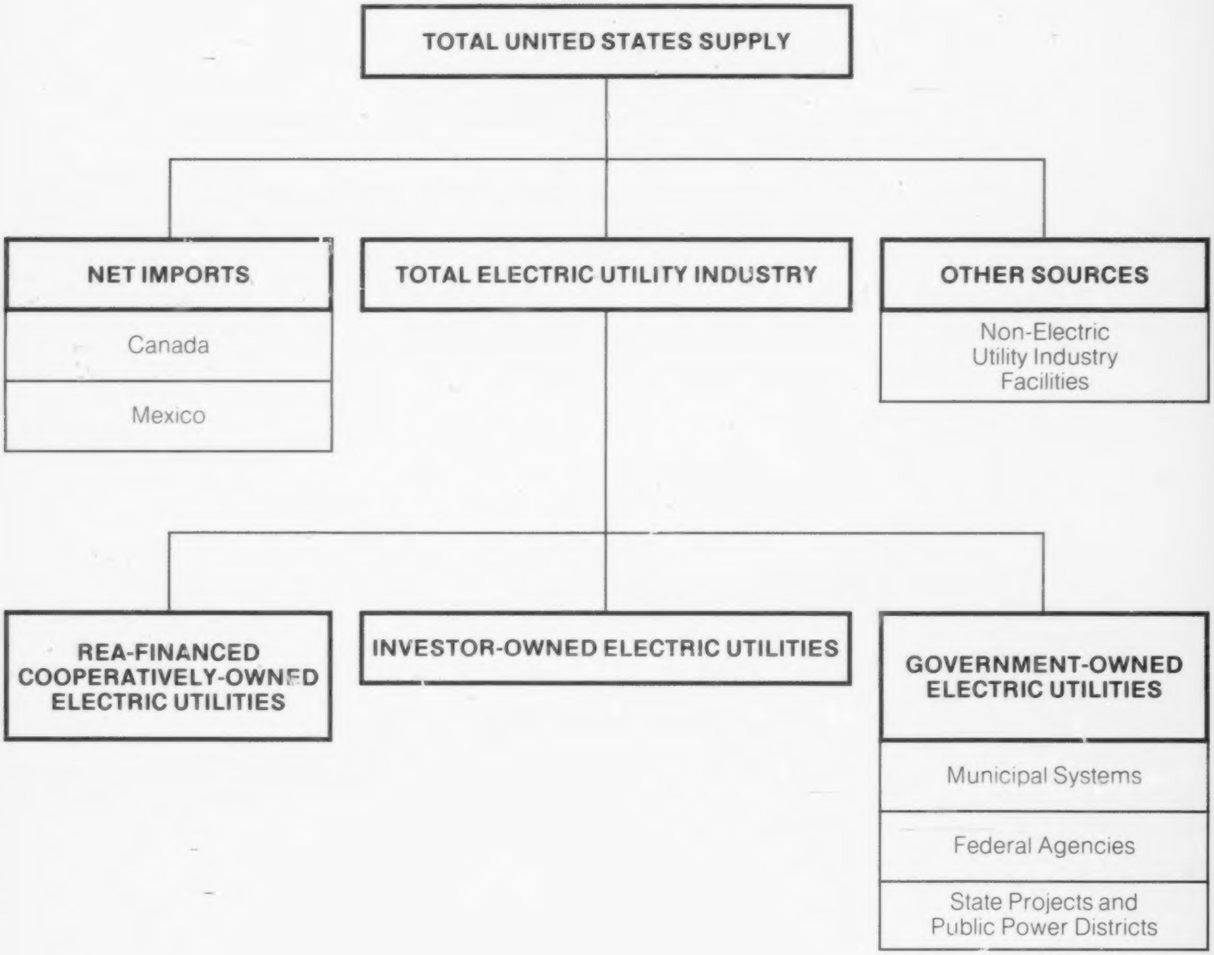
Total interest charges equalled $15.0 billion, up 3.8 percent when compared to 1988. The average interest rate on new long-term debt issued during 1989 was 9.9 percent.

Since 1976 long-term debt as a percentage of total capitalization has gradually declined from 51.9 to 49.1 percent in 1989. During this same period, common capital stock equity increased from 35.5 to 43.3 percent.

The average common stock dividend payout ratio before extraordinary items increased to 86.2 percent in 1989 from 85.4 percent in 1988. The earned return on average common equity before extraordinary items averaged 10.6 percent, down from 10.7 percent in 1988. During 1989, the investor-owned electric utilities were granted an estimated $1.8 billion in rate increases on an annualized basis. This is 12.5 percent below the $2.1 billion granted in 1988. AFUDC as a percentage of net income after preferred dividends and before common dividends was 15.5 percent.

In 1989 the investor-owned electric utilities raised $9.5 billion in new long-term financing, a 20.4 percent increase from 1988. Of this total, 88.1 percent was long-term debt, 3.7 percent was preferred stock and the remaining 8.2 percent was common stock. Additionally, the industry raised an estimated $1.1 billion in new equity as a result of participation by stockholders in dividend reinvestment plans. The new equity capital included not only dividend reinvestment, but also supplementary cash contributions by stockholders.

UNITED STATES SOURCES OF ELECTRIC GENERATION BY TYPE OF OWNERSHIP


TOTAL UNITED STATES SUPPLY
NET IMPORTS
Canada
Mexico
TOTAL ELECTRIC UTILITY INDUSTRY
OTHER SOURCES
Non-Electric Utility Industry Facilities
REA-FINANCED COOPERATIVELY-OWNED ELECTRIC UTILITIES
INVESTOR-OWNED ELECTRIC UTILITIES
GOVERNMENT-OWNED ELECTRIC UTILITIES
Municipal Systems
Federal Agencies
State Projects and Public Power Districts

	Total Electric Utility Industry			
			Increase	
	1989	1988	Amount	Percent
GENERATING CAPACITY—SECTION I (kW in Thousands)				
Installed Name Plate at Beginning of Year	723,852	718,056	5,796	0.8
Added During Year	...	...	...	...
Retired During Year	...	...	...	...
Net Adjustments*	...	...	...	...
Balance at December 31	730,883	723,852	7,031	1.0
ELECTRIC POWER SUPPLY—SECTION II (kW in Thousands)				
Capability at Time of Summer Peak Load (Contiguous U.S.)	673,316	661,580	11,736	1.8
Non-Coincident Summer Peak Load (Contiguous U.S.)	523,432	529,460	(6,028)	(1.1)
Capacity Margin (Contiguous U.S.)	22.3%	20.0%		
GENERATION—SECTION III (kWh in Millions)				
Hydro	265,061p	222,940r	42,121	18.9
Conventional Steam	1,984,478p	1,952,566r	31,912	1.6
Nuclear Steam	529,355p	526,973r	2,382	0.5
Internal Combustion	1,878p	1,762r	116	6.6
Total Generation	2,780,775p**	2,704,250r**	76,525	2.8
Received from Industrial Sources	93,983p	70,200r	23,783	33.9
Imports from Canada and Mexico	26,110	38,837	(12,727)	(32.8)
Total Energy Input†	2,900,868p**	2,813,287r**	87,581	3.1
FUEL—SECTION IV				
Average Cost of Fuel per net kWh	1.79¢	1.76¢	0.03¢	1.7
Lbs. of Coal per Net kWh Generated	0.987p	0.984r	0.003	0.3
Average Btu per Net kWh Generated	10,312	10,328	(16)	(0.2)
ENERGY—SECTION V (BTUs in Quadrillion)				
Annual Production of Energy	65.71p	65.97r	(0.26)	(0.4)
Total Energy Supply & Disposition	85.95p	84.61r	1.34	1.6
ENERGY SALES—SECTION VI (kWh in Millions)				
Residential	899,573p	886,070r	13,503	1.5
Commercial	718,014p	697,832r	20,182	2.9
Industrial	905,225p	881,790r	23,435	2.7
Street and Highway Lighting	14,548p	14,609r	(61)	(0.4)
Other	78,890p	73,860r	5,030	6.8
Total Sales to Ultimate Customers	2,616,251p	2,554,161r	62,090	2.4
Exports to Canada and Mexico	15,135	7,067	8,068	114.2
Energy Accounted for but Not Sold	12,887p	8,704r	4,183	48.1
Lost and Unaccounted for	254,490p	241,250r	13,240	5.5
Total Disposition of Energy†	2,898,763p	2,811,182r	87,581	3.1
kWh Used per Customer (Average for Year)				
Residential	9,489p	9,498r	(9)	(0.0)
Commercial	60,822p	60,435r	387	0.6
Total Ultimate Customer	24,362p	24,187r	175	0.7
CUSTOMERS AT YEAR END—SECTION VII (Thousands)				
Residential	95,567p	93,922r	1,645	1.8
Commercial	11,973p	11,637r	336	2.9
Industrial	500p	491r	9	1.8
Street and Highway Lighting	175p	170r	5	2.9
Other	196p	191r	5	2.6
Total Ultimate Customers	108,412p	106,411r	2,001	1.9
REVENUES—SECTION VIII (Millions of Dollars)				
Residential	$ 68,614p	$ 66,403r	$ 2,211	3.3
Commercial	51,592p	49,141r	2,451	5.0
Industrial	43,363p	41,561r	1,802	4.3
Street and Highway Lighting	1,542p	1,504r	38	2.5
Other	4,007p	3,779r	228	6.0
Total Revenues from Ultimate Customers	$ 169,117p	$ 162,388r	$ 6,729	4.1
Exports to Canada and Mexico	276	61	215	352.5
Total Revenues from Sales of Energy	$ 169,394p	$ 162,449r	$ 6,945	4.3
Average Annual Revenue per Customer:				
Residential	$ 723.77p	$ 711.78r	$ 11.99	1.7
Commercial	$4,370.35p	$4,255.93r	$114.42	2.7
Total Ultimate Customers	$1,573.54p	$1,536.46r	$ 37.08	2.4
Average Revenue per kWh:				
Residential	7.63¢p	7.49¢r	0.14¢	1.9
Commercial	7.19¢p	7.04¢r	0.15¢	2.1
Total Ultimate Customer	6.46¢p	6.36¢r	0.10¢	1.6
ECONOMICS & OTHER—SECTION X				
Miles of Overhead Electric Line, 22 kV and Above	627,390p	623,300r	4,090	0.7
Employees of Investor-Owned Electric Utilities	518,584p	522,362r	(3,778)	(0.7)
Plant Ratio-kWh Generated/kW of Capacity‡	3,823p	3,751r	72	1.9

Note: Total may not equal sum of components due to independent rounding.

**Represents reclassification in ownership between industrial and electric utility plants and rerating of turbines within the Electric Utility Industry.*

***Total includes generation by wind (1988r-0.9 kWh in millions; 1989p-0.5 kWh in millions) and generation by solar (1988r-9.1 kWh in millions; 1989-2.6 kWh in millions).*

†Excludes industrial for own use. ‡On basis of installed name plate capacity.

p Preliminary. r Revised. ( ) Denotes negative value.

FINANCIAL—SECTION IX (Millions of Dollars)	Investor-Owned Electric Utilities 1989	1988	Increase Amount	Increase Percent
COMBINED BALANCE SHEETS:				
ASSETS				
Utility Plant:				
Electric	$433,958p	$415,505r	$18,453	4.4
Other	23,666p	22,266r	1,400	6.3
Total Utility Plant	457,624p	437,771r	19,853	4.5
Accumulated Provision for Depreciation and Amortization	135,544p	123,517r	12,027	9.7
Net Utility Plant	322,079p	314,254r	7,825	2.5
Nuclear Fuel	19,873p	19,518r	355	1.8
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	11,514p	10,307r	1,207	11.7
Net Nuclear Fuel	8,359p	9,211r	(852)	(9.2)
Construction Work in Progress	35,206p	39,928r	(4,722)	(11.8)
Net Total Utility Plant	365,644p	363,394r	2,250	0.6
Other Property and Investment	18,768p	16,015r	2,753	17.2
Total Current and Accrued Assets	43,840p	41,275r	2,565	6.2
Total Deferred Debits	33,404p	27,780r	5,624	20.2
Total Assets	$461,657p	$448,464r	$13,193	2.9
CAPITALIZATION AND LIABILITIES				
Capitalization:				
Common Capital Stock	$ 57,329p	$ 58,351r	$ (1,022)	(1.8)
Other Paid-In Capital Excluding Retained Earnings	35,667p	35,891r	(224)	(0.6)
Retained Earnings	52,422p	48,324r	4,098	8.5
Total Common Capital Stock Equity	145,418p	142,566r	2,852	2.0
Preferred Stock	25,512p	25,394r	118	0.5
Total Long-Term Debt	164,705p	161,176r	3,529	2.2
Total Capitalization	335,636p	329,137r	6,499	2.0
Total Other Non-Current Liabilities	5,425p	6,466r	(1,041)	(16.1)
Total Current and Accrued Liabilities	46,081p	44,469r	1,612	3.6
Total Deferred Credits and Operating Reserves	28,818p	25,058r	3,760	15.0
Contributions in Aid of Construction	110p	157r	(47)	(29.9)
Deferred Income Taxes	45,588p	43,178r	2,410	5.6
Total Liabilities	$461,657p	$448,464r	$13,193	2.9
COMBINED INCOME STATEMENTS:				
Operating Revenues—Electric Department	$140,883p	$134,556r	$ 6,327	4.7
Operation and Maintenance Expenses	77,467p	74,182r	3,285	4.4
Depreciation, Depletion, Amortization and Property Losses	15,629p	14,092r	1,537	10.9
Deferred Expenses	(727)p	(930)r	203	N/M
Taxes	18,988p	18,421r	567	3.1
Total Operating Expenses	111,360p	105,765r	5,595	5.3
Operating Income	29,523p	28,790	733	2.5
Other Income (Non-Operating), Net	1,762p	1,516r	246	16.2
Other Departments	1,398p	1,340r	58	4.3
Income before Interest Charges (Gross Income)	32,683p	31,646r	1,037	3.3
Net Interest Charges	15,002p	14,448r	554	3.8
Income before Extraordinary Items	17,682p	17,198r	484	2.8
Extraordinary Items	(137)p	(1,431)r	1,294	N/M
Net Income	17,544p	15,766r	1,778	11.3
Preferred Dividend Charges	2,363p	2,008r	355	17.7
Available for Common Stock	15,182p	13,758r	1,424	10.4
Common Dividends	13,198p	12,967r	231	1.8
Net Income After Dividends	$ 1,984p	$ 791r	$ 1,193	150.8
Electric Utility Financing:				
Long-Term Debt	$ 10,994	$ 9,901	$ 1,093	11.0
Preferred Stock	720	748	(28)	(3.7)
Common Stock	772	503	269	53.5
Total Capital	$ 12,486	$ 11,151	$ 1,335	12.0
Construction Expenditures				
Production	$ 9,903p	$ 9,959r	$ (56)	(0.6)
Transmission	2,512p	1,942r	570	29.4
Distribution	8,685p	8,224r	461	5.6
Other	1,997p	1,725r	272	15.8
Total	$ 23,097p	$ 21,851r	$ 1,246	5.7

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised. ( ) Denotes negative value. N/M Not Meaningful.

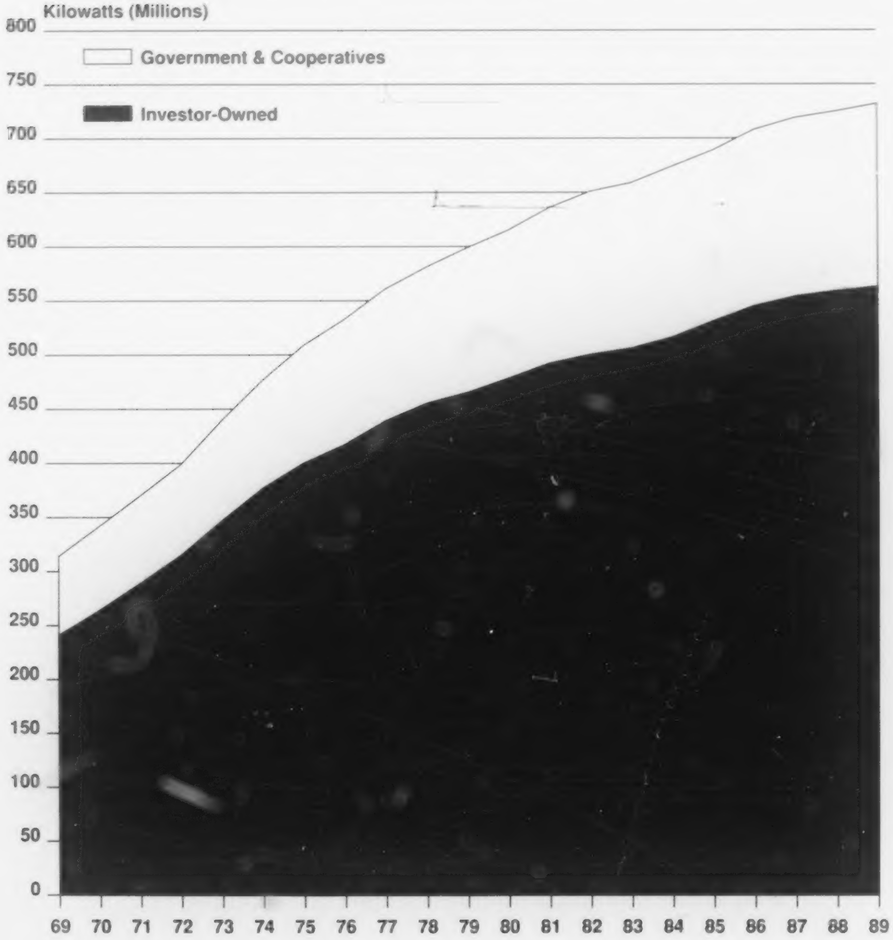
SECTION I

GENERATING CAPACITY

CHART I-A

INSTALLED GENERATING CAPACITY

TOTAL UNITED STATES



Based on Table 1, page 7.
Sources: U.S. Department of Energy, Energy Information Administration: Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860) and* Annual Electric Utility Report *(EIA-861).*

TABLE 1

INSTALLED GENERATING CAPACITY IN THE UNITED STATES

KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States
1989	**562,127**	**168,757**	**730,883**	**N/A**	**730,883****
1988	557,756	166,097	723,852	33,741r	757,593r
1987	552,795	165,261	718,056	30,015	748,071
1986	544,199	163,485	707,684	25,321	733,005
1985	530,405	158,328	688,733	22,920	711,653
1984	514,863	157,600	672,462	17,371e	689,833
1983	505,487	152,695	658,182	16,765e	674,947
1982	499,111	150,994	650,105	16,938e	667,043
1981	490,767	144,041	634,808	17,142e	651,950
1980	477,083	136,612	613,695	17,323e	631,018
1979	464,144	134,299	598,443	17,436	615,879
1978	453,647	125,665	579,312	19,391	598,703
1977	438,385	121,976	560,361	19,245	579,606
1976	415,504	115,658	531,162	19,113	550,275
1975	399,036	109,378	508,414	19,177	527,591
1974	376,122	100,046	476,168	19,351	495,519
1973	346,476	93,399	439,875	19,377	459,252
1972	314,353	84,400	398,753	18,768	417,521
1971	288,301	80,779	369,080	19,297	388,377
1970	262,675	78,415	341,090	19,237	360,327
1969	240,078	73,271	313,349	19,257	332,606

Note: Total may not equal sum of components due to independent rounding.

* *Includes non-electric utility industry facilities.*

** *Excludes Other Sources.*

N/A Not Available.

r Revised. *e Estimated.*

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759), Annual Electric Generator Report (EIA-860), Annual Electric Utility Report (EIA-861), *and Edison Electric Institute.*

TABLE 2

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
TOTAL (Capacity of Generators Driven by All Types of Prime Mover)							
1989	**730,883**	**562,127**	**26,358**	**142,399**	**40,668**	**67,193**	**34,537**
1988	723,852	557,756	26,383	139,714	40,388	64,792r	34,533r
1987	718,056	552,795	26,359	138,902	39,378	64,666	34,858
1986	707,684	544,199	26,430	137,055	38,584	63,864	34,607
1985	688,733	530,405	24,574	133,754	37,017	63,710	33,027
1984	672,462	514,863	24,738	132,862	36,717	63,304	32,841
1983	658,182	505,487	22,202	130,493	36,598	62,973	30,923
1982	650,105	499,111	21,463	129,530	35,819	62,544	31,168
1981	634,808	490,767	18,406	125,635	35,125	60,982	29,527
1980	613,695	477,083	15,422	121,190	34,598	59,083	27,509
1979	598,443	464,144	13,837	120,462	34,525	58,346	27,591
1978	579,312	453,647	11,635	114,030	34,426	54,282	25,322
1977	560,361	438,385	10,889	111,087	33,291	53,183	24,613
1976	531,162	415,504	9,947	105,711	30,602	51,707	23,402
1975	508,414	399,036	9,136	100,242	28,787	50,133	21,322
1974	476,168	376,122	7,474	92,572	27,324	45,518	19,730
1973	439,875	346,476	7,288	86,111	24,956	44,520	16,635
1972	398,753	314,353	6,704	77,696	23,049	40,408	14,239
1971	369,080	288,301	5,470	75,309	21,992	39,656	13,661
1970	341,090	262,675	5,162	73,253	20,941	38,718	13,594
1969	313,349	240,078	4,318	68,953	20,035	36,130	12,788
HYDRO (Capacity of Generators Driven by Water Wheels and Turbines)							
1989	**87,506**	**29,651**	**169**	**57,685**	**5,548**	**39,237**	**12,900**
1988	86,886	29,680	169	57,037	5,467	38,713	12,856
1987	85,910	29,149	113	56,648	5,401	38,438	12,809
1986	85,165	28,949	116	56,100	5,952	37,636	12,512
1985	83,015	27,571	104	55,340	5,159	37,631	12,550
1984	80,590	26,127	81	54,382	4,850	37,139	12,393
1983	78,968	24,977	81	53,910	4,781	36,803	12,326
1982	78,128	24,584	81	53,464	4,729	36,378	12,357
1981	77,145	24,319	67	52,759	4,686	35,891	12,182
1980	76,378	24,227	67	52,084	4,692	35,212	12,180
1979	75,351	23,916	67	51,368	4,693	34,495	12,180
1978	71,014	23,847	67	47,100	4,694	30,431	11,975
1977	68,762	23,158	67	45,537	4,431	29,332	11,774
1976	67,757	23,134	67	44,556	4,010	29,031	11,515
1975	65,949	23,115	67	42,767	3,760	27,480	11,527
1974	63,560	22,737	54	40,769	3,814	25,447	11,508
1973	61,782	21,770	56	39,956	3,334	25,582	11,040
1972	56,386	19,122	54	37,210	3,330	24,336	9,544
1971	55,912	19,076	54	36,782	3,260	24,056	9,466
1970	55,056	18,850	56	36,150	3,195	23,499	9,456
1969	52,753	18,444	56	34,253	3,195	22,054	9,004
CONVENTIONAL STEAM (Capacity of Generators Driven by Steam Engines and Turbines)							
1989	**529,144**	**433,140**	**25,898**	**70,106**	**30,896**	**22,058**	**17,152**
1988	526,564	432,556	25,916	68,091	30,722	20,177	17,192
1987	524,286	431,677	25,950	66,659	29,629	20,326	16,704
1986	524,136	432,601	25,963	65,571	28,495	20,326	16,750
1985	520,299	433,103	24,098	63,098	27,764	20,177	15,156
1984	516,537	429,047	24,278	63,212	27,788	20,244	15,181
1983	507,136	422,944	21,767	62,424	27,737	20,244	14,444
1982	503,804	420,863	21,011	61,930	27,026	20,246	14,658
1981	491,287	413,571	17,939	59,778	26,199	20,392	13,187
1980	475,276	403,031	14,954	57,291	25,697	20,393	11,201
1979	462,999	392,349	13,375	57,275	25,599	20,378	11,298
1978	449,231	383,024	11,073	55,134	25,511	20,378	9,245
1977	436,426	371,976	10,429	54,021	24,590	20,378	9,053
1976	415,181	355,263	9,061	50,857	22,396	20,355	8,106
1975	397,649	340,907	8,264	48,478	20,843	20,332	7,303
1974	375,940	323,490	7,017	45,433	20,395	18,899	6,139
1973	352,072	303,536	6,836	41,700	18,511	18,917	4,272
1972	322,201	279,129	6,254	36,818	16,895	16,052	3,871
1971	299,996	260,016	5,018	34,962	16,026	15,576	3,360
1970	275,191	236,792	4,761	33,638	15,141	15,194	3,303
1969	252,411	217,196	3,925	31,290	14,291	14,051	2,948

See page 9 for footnotes.

TABLE 2 (continued)

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
NUCLEAR STEAM (Capacity of Generators Driven by Nuclear Reactors)							
1989	**106,746**	**95,454**	**—**	**11,294**	**963**	**5,897**	**4,434**
1988	103,397	92,103	—	11,294	963	5,897r	4,434r
1987	101,604	89,450	—	12,154	963	5,897	5,294
1986	92,417	80,213	50	12,154	963	5,897	5,294
1985	80,397	68,238	50	12,109	963	5,897	5,249
1984	70,484	58,380	50	12,054	963	5,897	5,194
1983	67,073	56,069	50	10,954	963	5,897	4,094
1982	63,042	52,038	50	10,954	963	5,897	4,094
1981	60,776	50,992	50	9,734	963	4,677	4,094
1980	56,488	47,960	50	8,478	963	3,456	4,059
1979	54,593	46,065	50	8,478	963	3,456	4,059
1978	53,527	44,984	65	8,478	963	3,456	4,059
1977	49,880	41,654	55	8,171	963	3,456	3,752
1976	42,918	35,419	480	7,019	963	2,304	3,752
1975	39,754	33,539	480	5,735	963	2,304	2,468
1974	31,662	28,397	55	3,210	—	1,152	2,058
1973	21,118	19,766	53	1,299	—	—	1,299
1972	15,302	14,449	53	800	—	—	800
1971	8,688	7,833	55	800	—	—	800
1970	6,493	5,693	—	800	—	—	800
1969	3,980	3,180	—	800	—	—	800
INTERNAL COMBUSTION (Capacity of Generators Driven by Internal Combustion Engines)							
1989	**7,482**	**3,880**	**290**	**3,311**	**3,258**	**1**	**52**
1988	6,999	3,416	298	3,285	3,233	—	52
1987	6,212	2,484	296	3,432	3,381	—	52
1986	5,944	2,420	301	3,224	3,171	—	52
1985	5,001	1,477	322	3,202	3,130	*	72
1984	4,841	1,306	330	3,205	3,115	17	73
1983	4,996	1,494	304	3,198	3,117	22	58
1982	5,131	1,627	321	3,182	3,101	22	60
1981	5,600	1,885	351	3,364	3,278	22	65
1980	5,553	1,865	351	3,337	3,246	22	69
1979	5,500	1,814	345	3,341	3,270	17	54
1978	5,540	1,792	430	3,318	3,258	17	43
1977	5,293	1,597	338	3,358	3,307	17	34
1976	5,306	1,688	339	3,279	3,233	17	29
1975	5,062	1,475	325	3,262	3,221	17	24
1974	5,006	1,498	348	3,160	3,115	20	25
1973	4,903	1,404	343	3,156	3,111	21	24
1972	4,864	1,653	343	2,868	2,824	20	24
1971	4,484	1,376	343	2,765	2,706	24	35
1970	4,350	1,340	345	2,665	2,605	25	35
1969	4,205	1,258	337	2,610	2,549	25	36
WIND† (Capacity of Generators Driven by Wind Turbines)							
1989	*	*	*	*	*	*	**—**
1988	4	*	*	4	*	4	—
1987	26	22	—	4	*	4	—
1986	8	3	—	4	*	4	—
1985	7	3	—	4	*	4	—
1984	10	3	—	7	*	7	—
1983	9	3	—	7	—	7	—
SOLAR‡ (Capacity of Generators Driven by Photovoltaic and Solar Thermal Energy)							
1989	**3**	**1**	**—**	**2**	**2**	**—**	**—**
1988	2	*	—	2	2	—	—
1987	17	13	—	4	4	—	—
1986	15	13	—	2	2	—	—
1985	14	13	—	1	1	—	—
1984	1	—	—	1	1	—	—

Note: Total may not equal sum of components due to independent rounding.

**Less than five hundred kilowatts.*

† Prior to 1983 capacity by wind not available.

‡ Prior to 1984 capacity by solar not available.

r Revised.

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 3

INSTALLED GENERATING CAPACITY
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1988 and 1989—KILOWATTS IN THOUSANDS (NAMEPLATE)

	Total Electric Utility Industry†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988
Total United States	**730,883**	**723,852**	**87,506**	**86,886**	**529,144**	**526,564**	**106,748**	**103,397**	**7,482**	**6,999**
Maine	2,396	2,366	358	354	1,104	1,104	890	864	44	44
New Hampshire	1,405	1,405	262	262	1,143	1,143	—	—	—	—
Vermont	1,106	1,112	352	358	170	170	563	563	20	20
Massachusetts	10,057	10,005	1,648	1,656	7,322	7,265	863	863	224	221
Rhode Island	273	273	2	2	243	243	—	—	29	29
Connecticut	7,431	7,415	133	133	3,491	3,512	3,425	3,425	382	345
New England	**22,668**	**22,576**	**2,754**	**2,764**	**13,473**	**13,438**	**5,741**	**5,715**	**700**	**659**
New York	33,401	33,169	5,030	5,024	23,022	22,797	5,234	5,234	115	115
New Jersey	14,771	14,631	387	387	10,216	10,076	4,160	4,160	8	8
Pennsylvania	36,938	35,884	1,858	1,858	25,504	25,533	9,511	8,419	65	74
Middle Atlantic	**85,109**	**83,684**	**7,275**	**7,269**	**58,741**	**58,406**	**18,905**	**17,813**	**189**	**197**
Ohio	27,525	27,594	119	119	25,074	25,143	2,215	2,215	117	117
Indiana	22,902	21,528	92	94	22,651	21,193	—	—	158	242
Illinois	36,870	36,862	12	14	22,405	22,471	13,734	13,734	719	643
Michigan	24,101	24,152	2,343	2,343	17,073	17,127	4,326	4,326	359	356
Wisconsin	10,993	11,240	447	447	8,860	9,110	1,583	1,583	103	101
East North Central	**122,391**	**121,377**	**3,012**	**3,017**	**96,064**	**95,043**	**21,858**	**21,858**	**1,457**	**1,459**
Minnesota	9,190	9,363	137	145	7,039	7,199	1,755	1,755	259	[illegible]
Iowa	8,491	8,491	130	130	7,391	7,391	597	597	373	373
Missouri	16,712	16,641	1,064	1,064	14,055	14,012	1,236	1,236	357	329
North Dakota	4,677	4,683	517	517	4,135	4,141	—	—	25	25
South Dakota	2,656	2,648	1,705	1,694	893	893	—	—	58	60
Nebraska	5,698	5,730	183	182	3,919	3,952	1,338	1,338	258	258
Kansas	[illegible]	10,741	2	2	8,978	8,937	1,236	1,236	568	566
West North Central	**58,207**	**58,296**	**3,738**	**3,734**	**46,410**	**46,526**	**6,161**	**6,161**	**1,898**	**1,874**
Delaware	2,131	1,899	—	—	2,122	1,892	—	—	9	7
Maryland	10,431	10,418	494	494	7,789	7,790	1,829	1,829	320	306
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	14,034	13,642	3,058	2,983	7,302	6,984	3,655	3,655	20	21
West Virginia	15,078	15,163	101	175	14,977	14,988	—	—	—	—
North Carolina	20,901	20,887	1,948	1,948	13,824	13,810	5,125	5,125	4	4
South Carolina	16,310	16,266	2,348	2,348	7,161	7,117	6,799	6,799	1	1
Georgia	23,052	21,740	2,433	2,429	16,150	16,392	4,130	2,915	339	5
Florida	36,211	36,047	43	42	30,793	30,699	4,110	4,110	1,265	1,196
South Atlantic	**139,016**	**136,931**	**10,425**	**10,420**	**100,985**	**100,539**	**25,648**	**24,433**	**1,958**	**1,539**
Kentucky	16,779	16,601	746	746	16,018	15,841	—	—	14	14
Tennessee	18,213	18,209	3,717	3,714	12,054	12,054	2,441	2,441	—	—
Alabama	20,547	19,910	2,857	2,857	12,457	11,821	5,233	5,233	—	—
Mississippi	7,186	7,154	—	—	5,734	5,702	1,373	1,373	79	79
East South Central	**62,724**	**61,875**	**7,321**	**7,317**	**46,264**	**45,419**	**9,046**	**9,046**	**93**	**93**
Arkansas	9,834	9,764	1,160	1,118	6,791	6,766	1,845	1,845	37	35
Louisiana	18,012	18,216	—	—	15,664	15,869	2,236	2,236	112	111
Oklahoma	13,589	13,589	968	968	12,486	12,485	—	—	136	136
Texas	64,765	62,866	620	607	61,268	60,729	2,709	1,354	168	175
West South Central	**106,199**	**104,434**	**2,748**	**2,693**	**96,208**	**95,849**	**6,790**	**5,435**	**453**	**456**
Montana	4,929	4,936	2,269	2,277	2,659	2,659	—	—	—	—
Idaho	2,063	2,089	2,008	2,031	50	50	—	—	5	7
Wyoming	5,865	5,853	258	242	5,590	5,590	—	—	18	18
Colorado	6,704	7,263	1,039	1,039	5,585	5,808	—	336	80	80
New Mexico	5,562	5,598	55	55	5,492	5,526	—	—	15	18
Arizona	16,112	15,923	2,685	2,546	9,213	9,163	4,210	4,210	4	4
Utah	5,209	5,221	222	226	4,914	4,921	—	—	74	74
Nevada	5,085	4,993	984	892	4,039	4,039	—	—	62	62
Mountain	**51,530**	**51,875**	**9,519**	**9,306**	**37,543**	**37,756**	**4,210**	**4,546**	**258**	**263**
Washington	23,258	23,276	19,841	19,859	2,213	2,213	1,200	1,200	4	4
Oregon	10,606	10,366	8,113	7,873	1,272	1,272	1,216	1,216	6	6
California	45,876	45,944	12,513	12,423	27,341	27,499	5,974	5,974	45	47
Pacific	**79,740**	**79,586**	**40,467**	**40,154**	**30,826**	**30,984**	**8,390**	**8,390**	**55**	**56**
Alaska	1,764	1,714	242	209	1,248	1,239	—	—	274	267
Hawaii	1,535	1,504	3	3	1,383	1,365	—	—	149	136
Alaska & Hawaii	**3,299**	**3,219**	**245**	**212**	**2,631**	**2,604**	**—**	**—**	**422**	**403**

Note: Total may not equal sum of components due to independent rounding.

†Total includes wind turbine capacity (1988—4.5 kW in thousands; 1989—0.5 kW in thousands) and solar energy capacity (1988—2.4 kW in thousands; 1989—3.4 kW in thousands).

Sources: U.S. Department of Energy. Energy Information Administration. Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 4

INSTALLED GENERATING CAPACITY
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1988 and 1989—KILOWATTS IN THOUSANDS (NAME PLATE)

	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988
Total United States	**562,127**	**557,756**	**29,651**	**29,680**	**433,140**	**432,556**	**95,454**	**92,103**	**3,880**	**3,416**
Maine	2,393	2,363	358	353	1,104	1,104	890	864	41	41
New Hampshire	1,405	1,405	262	262	1,143	1,143	—	—	—	—
Vermont	1,005	1,011	332	338	92	92	563	563	18	18
Massachusetts	9,165	9,105	1,645	1,645	6,503	6,447	863	863	153	150
Rhode Island	271	272	—	—	243	243	—	—	29	29
Connecticut	7,373	7,357	130	130	3,452	3,473	3,425	3,425	367	330
New England	**21,612**	**21,513**	**2,727**	**2,728**	**12,537**	**12,502**	**5,741**	**5,715**	**608**	**568**
New York	26,338	26,107	894	888	22,063	21,838	3,338	3,338	43	43
New Jersey	14,573	14,534	387	387	10,118	9,979	4,160	4,160	8	8
Pennsylvania	36,916	35,862	1,836	1,836	25,504	25,533	9,511	8,419	65	74
Middle Atlantic	**77,927**	**76,502**	**3,117**	**3,111**	**57,685**	**57,350**	**17,009**	**15,917**	**117**	**125**
Ohio	24,746	26,686	48	48	22,410	24,350	2,215	2,215	74	74
Indiana	21,342	20,069	92	94	21,114	19,755	—	—	137	221
Illinois	35,736	35,738	12	14	21,521	21,587	13,734	13,734	469	403
Michigan	22,574	22,574	2,304	2,304	15,790	15,790	4,326	4,326	154	154
Wisconsin	9,757	9,994	404	404	7,743	7,983	1,583	1,583	27	25
East North Central	**114,155**	**115,061**	**2,859**	**2,863**	**88,577**	**89,465**	**21,858**	**21,858**	**861**	**876**
Minnesota	8,272	8,451	132	140	6,380	6,551	1,755	1,755	4	4
Iowa	7,322	7,322	127	127	6,578	6,578	597	597	21	21
Missouri	12,041	12,042	596	596	10,180	10,205	1,236	1,236	29	5
North Dakota	607	607	—	—	606	606	—	—	*	*
South Dakota	808	811	*	*	758	758	—	—	49	52
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	8,245	8,240	2	2	7,001	6,997	1,236	1,236	6	6
West North Central	**37,294**	**37,472**	**857**	**865**	**31,503**	**31,695**	**4,824**	**4,824**	**110**	**88**
Delaware	1,971	1,741	—	—	1,971	1,741	—	—	—	—
Maryland	10,331	10,331	494	494	7,754	7,754	1,829	1,829	255	255
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	13,788	13,398	2,821	2,746	7,300	6,982	3,655	3,655	12	16
West Virginia	15,078	15,163	101	175	14,977	14,988	—	—	—	—
North Carolina	20,126	20,126	1,481	1,481	13,520	13,520	5,125	5,125	—	—
South Carolina	13,152	13,108	1,846	1,846	4,507	4,463	6,799	6,799	—	—
Georgia	21,488	20,180	886	886	16,132	16,375	4,130	2,915	339	5
Florida	27,455	27,457	*	*	22,345	22,413	4,110	4,110	999	934
South Atlantic	**124,256**	**122,373**	**7,630**	**7,629**	**89,374**	**89,103**	**25,648**	**24,433**	**1,605**	**1,208**
Kentucky	7,980	7,812	110	110	7,869	7,701	—	—	—	—
Tennessee	172	172	172	172	—	—	—	—	—	—
Alabama	11,450	10,813	1,583	1,583	8,091	7,454	1,777	1,777	—	—
Mississippi	6,414	6,382	—	—	4,963	4,930	1,373	1,373	79	79
East South Central	**26,015**	**25,178**	**1,865**	**1,865**	**20,922**	**20,086**	**3,149**	**3,149**	**79**	**79**
Arkansas	8,392	8,367	65	65	6,476	6,451	1,845	1,845	6	6
Louisiana	15,092	15,297	—	—	12,820	13,025	2,236	2,236	36	36
Oklahoma	10,331	10,331	—	—	10,306	10,306	—	—	25	25
Texas	53,420	51,521	91	91	50,584	50,040	2,709	1,354	37	37
West South Central	**87,235**	**85,516**	**156**	**156**	**80,186**	**79,822**	**6,790**	**5,435**	**104**	**104**
Montana	3,633	3,640	974	981	2,659	2,659	—	—	—	—
Idaho	1,369	1,384	1,314	1,329	50	50	—	—	5	5
Wyoming	3,900	3,900	2	2	3,880	3,880	—	—	18	18
Colorado	3,094	3,430	342	342	2,727	2,727	—	336	26	26
New Mexico	5,118	5,151	—	—	5,103	5,136	—	—	15	15
Arizona	8,245	8,194	7	7	4,024	3,974	4,210	4,210	4	4
Utah	2,781	2,786	59	63	2,723	2,723	—	—	—	—
Nevada	4,111	4,111	9	9	4,039	4,039	—	—	62	62
Mountain	**32,250**	**32,596**	**2,706**	**2,733**	**25,205**	**25,188**	**4,210**	**4,546**	**129**	**129**
Washington	3,180	3,198	964	982	2,213	2,213	—	—	3	3
Oregon	3,967	3,967	1,485	1,485	1,260	1,260	1,216	1,216	6	6
California	32,570	32,761	5,267	5,245	22,259	22,473	5,011	5,011	32	32
Pacific	**39,717**	**39,925**	**7,717**	**7,712**	**25,733**	**25,946**	**6,227**	**6,227**	**40**	**40**
Alaska	131	114	16	16	35	35	—	—	80	63
Hawaii	1,535	1,504	3	3	1,383	1,365	—	—	149	136
Alaska & Hawaii	**1,666**	**1,619**	**20**	**20**	**1,418**	**1,400**	**—**	**—**	**228**	**199**

Note: Total may not equal sum of components due to independent rounding.

†Total includes wind turbine capacity (1988—0.3 kW in thousands; 1989—0.3 kW in thousands) and solar energy capacity (1988—0.1 kW in thousands; 1989—1.1 kW in thousands).

**Less than five hundred kilowatts.*

Sources: U.S. Department of Energy, Energy Information Administration. Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 5

CHANGES IN INSTALLED GENERATING CAPACITY
TOTAL ELECTRIC UTILITY INDUSTRY*

BY TYPE OF PRIME MOVER DRIVING THE GENERATOR
1970-1989—KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	New Additions	Retirements	Adjustments**		Net Additions	At December 31st	New Additions	Retirements	Adjustments**		Net Additions
			Plus	Minus					Plus	Minus	
1989‡						**1979‡**					
Hydro	....	....	....	....	620	Hydro	....	....	....	....	4,337
Steam	....	....	....	....	5,931	Steam	....	....	....	....	14,834
Internal Combustion	....	....	....	....	483	Internal Combustion	....	....	....	....	(40)
Total	....	....	....	....	7,031	Total	....	....	....	....	19,131
1988‡						**1978‡**					
Hydro	....	....	....	....	976	Hydro	....	....	....	....	2,252
Steam	....	....	....	....	4,071	Steam	....	....	....	....	16,452
Internal Combustion	....	....	....	....	787	Internal Combustion	....	....	....	....	247
Total	....	....	....	....	5,796	Total	....	....	....	....	18,951
1987‡						**1977‡**					
Hydro	....	....	....	....	745	Hydro	....	....	....	....	1,005
Steam	....	....	....	....	9,337	Steam	....	....	....	....	28,207
Internal Combustion	....	....	....	....	268	Internal Combustion	....	....	....	....	(13)
Total	....	....	....	....	10,372	Total	....	....	....	....	29,199
1986‡						**1976‡**					
Hydro	....	....	....	....	2,150	Hydro	....	....	....	....	1,808
Steam	....	....	....	....	15,857	Steam	....	....	....	....	20,696
Internal Combustion	....	....	....	....	943	Internal Combustion	....	....	....	....	244
Total	....	....	....	....	18,951	Total	....	....	....	....	22,748
1985‡						**1975‡**					
Hydro	....	....	....	....	2,425	Hydro	....	....	....	....	2,389
Steam	....	....	....	....	13,675	Steam	....	....	....	....	29,801
Internal Combustion	....	....	....	....	160	Internal Combustion	....	....	....	....	56
Total	....	....	....	....	16,271	Total	....	....	....	....	32,246
1984‡						**1974‡**					
Hydro	....	....	....	....	1,622	Hydro	....	....	....	....	1,778
Steam	....	....	....	....	12,812	Steam	....	....	....	....	34,412
Internal Combustion	....	....	....	....	(155)	Internal Combustion	....	....	....	....	103
Total	....	....	....	....	14,280	Total	....	....	....	....	36,293
1983‡						**1973‡**					
Hydro	....	....	....	....	840	Hydro	....	....	....	....	5,396
Steam	....	....	....	....	7,363	Steam	....	....	....	....	35,687
Internal Combustion	....	....	....	....	(135)	Internal Combustion	....	....	....	....	39
Total	....	....	....	....	8,077	Total	....	....	....	....	41,122
1982‡						**1972‡**					
Hydro	....	....	....	....	983	Hydro	....	....	....	....	474
Steam	....	....	....	....	14,783	Steam	....	....	....	....	28,819
Internal Combustion	....	....	....	....	(469)	Internal Combustion	....	....	....	....	380
Total	....	....	....	....	15,297	Total	....	....	....	....	29,673
1981‡						**1971‡**					
Hydro	....	....	....	....	767	Hydro	....	....	....	....	856
Steam	....	....	....	....	20,299	Steam	....	....	....	....	27,000
Internal Combustion	....	....	....	....	47	Internal Combustion	....	....	....	....	134
Total	....	....	....	....	21,113	Total	....	....	....	....	27,990
1980‡						**1970**					
Hydro	....	....	....	....	1,027	Hydro	2,244	48	109	3	2,302
Steam	....	....	....	....	14,172	Steam	25,506	905	882	190	25,293
Internal Combustion	....	....	....	....	53	Internal Combustion	242	40	42	98	146
Total	....	....	....	....	15,252	Total	27,992	993	1,033	291	27,741

Note: *Total may not equal sum of components due to independent rounding.*

**Beginning 1983 wind turbine capacity included in total—9.3 kW in thousands; 1984 total—9.6 kW in thousands; 1985 total—7.4 kW in thousands; 1986 total—7.5 kW in thousands; 1987 total—26.3 kW in thousands; 1988 total—4.5 kW in thousands; 1989 total—0.5 kW in thousands.*

Beginning 1984 solar energy capacity included in total—1.0 kW in thousands; 1985 total—13.5 kW in thousands; 1986 total—14.5 kW in thousands; 1987 total—16.5 kW in thousands; 1988 total—2.4 kW in thousands; 1989 total—3.4 kW in thousands.

***Adjustments are result of reclassification in ownership between industrial and electric utility plants and rerating of turbines within the Total Electric Utility Industry.*

‡Complete data not available at time of printing.

( ) Denotes negative value.

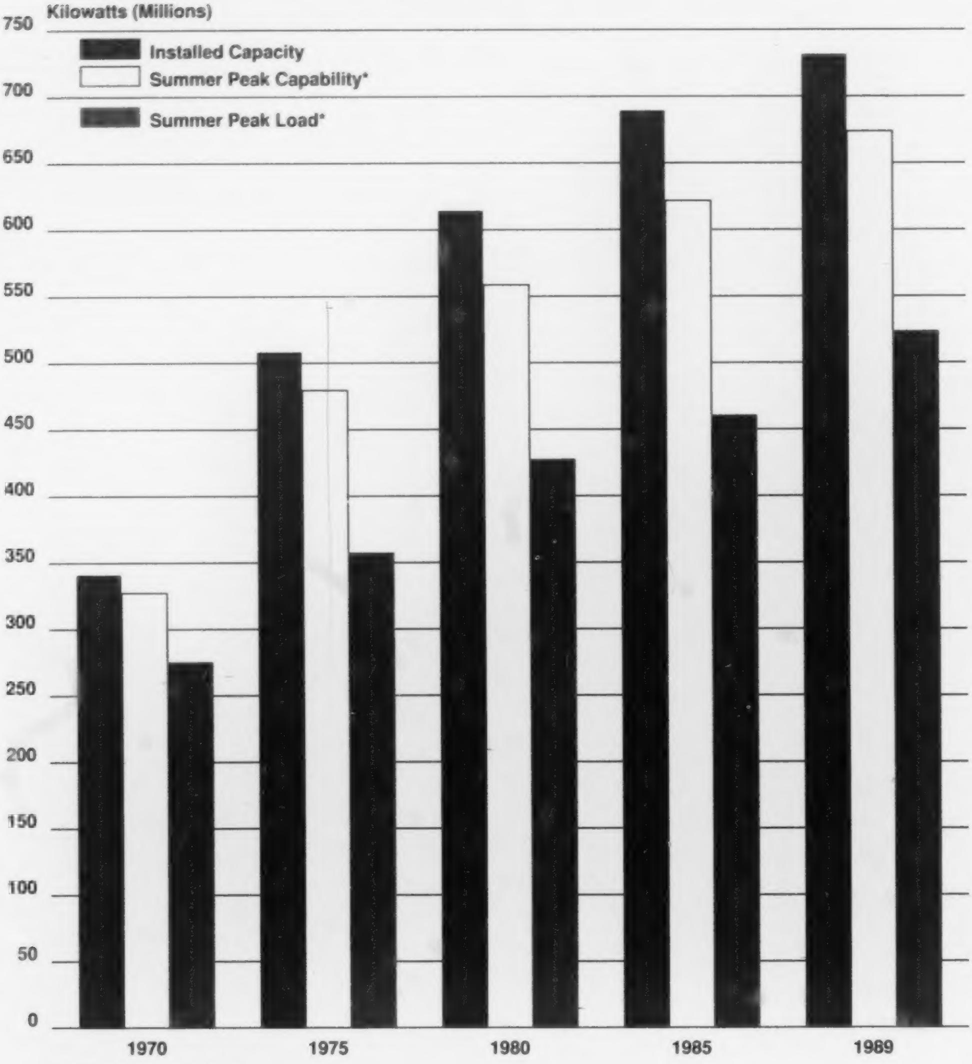
Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860),* and Annual Electric Utility Report *(EIA-861).*

SECTION II
ELECTRIC POWER SUPPLY

CHART II-A

CAPACITY, CAPABILITY & PEAK LOAD

TOTAL ELECTRIC UTILITY INDUSTRY



*Excludes Alaska & Hawaii

Based on Table 1, page 7 and Table 7, page 14

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860) and* Annual Electric Utility Report *(EIA-861);*
Edison Electric Institute, Electric Power Annual Report.

TABLE 7

CAPABILITY*—PEAK LOAD—KILOWATTHOUR REQUIREMENTS TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)

Year	Capability at Time of Summer Peak Load (MW)	Non-Coincident Summer Peak Load (MW)	Capability at Time of Winter Peak Load (MW)†	Non-Coincident Winter Peak Load (MW)†	Capacity Margin Based on Non-Coincident Peak Load (%)†‡	Annual Kilowatthour Requirements (in Millions)	Annual Load Factor Based on Peak Load (%)
1989	**673,316**	**523,432**	**685,249**	**496,378**	**22.3**	**2,849,824**	**62.2**
1988	661,580	529,460	676,940	466,533	20.0	2,768,858	59.5
1987	648,118	496,185	662,977	448,277	23.4	2,643,532	60.8
1986	633,291	476,320	646,721	422,857	24.8	2,532,104	60.7
1985	621,597	460,503	636,475	423,660	25.9	2,499,226	62.0
1984	604,240	451,150	622,125	436,374	25.3	2,445,603	59.7
1983	596,449	447,526	612,453	410,779	25.0	2,341,633	59.5
1982	586,142	415,618	598,066	373,985	29.1	2,258,744	62.0
1981	572,219	429,349	586,569	397,800	25.0	2,311,026	61.0
1980	558,237	427,058	572,195	384,567	23.5	2,292,718	61.0
1979	544,506	398,424	554,525	368,876	26.8	2,246,927	64.4
1978	545,700	408,050	561,550	383,100	25.2	2,218,700	62.1
1977	516,000	396,350	537,600	360,200	23.2	2,132,300	61.4
1976	498,750	370,900	511,000	349,850	25.6	2,039,500	62.6
1975	479,300	356,800	492,450	331,100	25.6	1,919,500	61.4
1974	444,400	349,250	467,400	302,500	21.4	1,871,700	61.2
1973	415,500	343,900	433,150	295,150	17.2	1,868,800	62.0
1972	381,700	319,150	394,050	290,950	16.4	1,752,200	62.5
1971	353,250	292,100	366,700	261,650	17.3	1,617,100	63.2
1970	326,900	274,650	339,050	248,550	16.0	1,536,400	63.9
1969	300,300	257,650	311,450	236,600	14.2	1,446,000	64.1

**Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions. It must, therefore, provide the necessary allowance for maintenance, emergency outages, and system operating requirements. This rating is more indicative of the actual generating ability of existing power stations than the familiar name-plate rating as used in other tables of this publication.*

†Beginning in 1973 capability and peak load data shown under Winter represent turn-of-year data for the winter season that follows the summer peak load data for that calendar year. Previously, data in this series was always for the month of December.

‡Calculated from the maximum non-coincident peak load, summer or winter, and the capability at the time of this peak load. Percent Capacity Margin is the difference between capability and peak load divided by capability multiplied by 100.

Sources: North American Electric Reliability Council and Edison Electric Institute. All data series shown have a discontinuity between 1978 and 1979 because of the switch to NERC data. For calculation of percent changes between 1978 and 1979, see old series values for 1979 in Table 6 of 1979 edition.

TABLE 8

ELECTRICITY MADE AVAILABLE IN THE UNITED STATES

KILOWATTHOURS IN MILLIONS

	Generation								
Year	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States	Net Imports of Electric Energy	Total Available in U.S.	Estimated Population† (Thousands) (July 1)	kWh Per Person
1989p	**2,188,497**	**592,278**	**2,780,775**	**N/A**	**2,780,775****	**10,976**	**2,791,751****	**248,239**	**11,246****
1988r	2,145,601	558,650	2,704,250	174,252	2,878,502	31,770	2,910,272	245,785	11,841
1987	2,022,260	549,867	2,572,127	146,609	2,718,736r	46,338	2,765,074	243,427r	11,359
1986	1,928,199	559,111	2,487,310	112,008	2,599,318	35,897	2,635,215	241,078	10,931
1985	1,918,032	551,809	2,469,841	98,478	2,568,319	40,936	2,609,255	238,741	10,929
1984	1,848,916	567,388	2,416,304	71,520e	2,487,824	39,661	2,527,485	236,477	10,688
1983	1,764,080	546,205	2,310,285	57,678e	2,367,963	35,330	2,403,293	234,284	10,258
1982	1,711,576	529,635	2,241,211	61,076e	2,302,287	30,744	2,333,031	231,996	10,056
1981	1,785,500	509,312	2,294,812	64,446e	2,359,258	33,584	2,392,842	229,637	10,420
1980	1,782,933	503,481	2,286,414	67,945e	2,354,359	20,925	2,375,284	227,255	10,452
1979	1,756,170	491,189	2,247,359	71,375	2,318,734	20,334	2,339,068	224,567	10,416
1978	1,721,163	485,150	2,206,313	78,967	2,285,280	19,328	2,304,608	222,095	10,377
1977	1,684,084	440,082	2,124,166	87,575	2,211,741	17,415	2,229,156	219,760	10,144
1976	1,582,029	455,645	2,037,674	87,084	2,124,758	8,611	2,133,369	217,563	9,806
1975	1,486,844	430,775	1,917,619	85,362	2,002,981	6,185	2,009,166	215,465	9,325
1974	1,442,114	424,322	1,866,436	101,572	1,968,008	12,694	1,980,702	213,342	9,284
1973	1,448,860	407,356	1,856,216	102,529	1,958,745	14,278	1,973,023	211,357	9,335
1972	1,358,929	390,708	1,749,637	104,508	1,854,145	7,744	1,861,889	209,284	8,896
1971	1,248,596	363,993	1,612,589	103,239	1,715,828	3,530	1,719,358	206,827	8,313
1970	1,183,190	348,419	1,531,609	108,162	1,639,771	1,960	1,641,731	203,984	8,048
1969	1,102,162	340,020	1,442,182	110,575	1,552,757	1,072	1,553,829	201,385	7,716

Note: Total may not equal sum of components due to independent rounding.

**Includes non-electric utility industry facilities.*

***Excludes Other Sources.*

†U.S. Department of Commerce. Bureau of Census estimates; excludes Armed Forces overseas.

N/A Not Available.

e Estimated. p Preliminary. r Revised. ( ) Denotes negative value.

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759). Economic Regulatory Administration,* Electricity Transactions Across International Borders, *and Edison Electric Institute.*

TABLE 9

TOTAL UNITED STATES KILOWATTHOUR SOURCE AND DISPOSITION

1969-1989—KILOWATTHOURS IN MILLIONS

	1989p	1988r	1987	1986	1985	1984	1983
SOURCE							
Generation							
Total Electric Utility Industry	2,780,775	2,704,250	2,572,127	2,487,310	2,469,841	2,416,304	2,310,285
Industrials*	N/A	104,052	93,981	71,289	70,178	52,125e	42,029e
Industrials*—Received by Electric Utility Industry	93,983	70,200	52,628	40,719	28,300	19,395	15,649
Total Generation	**2,874,758**	**2,878,502**	**2,718,736**	**2,599,318**	**2,568,319**	**2,487,824**	**2,367,963**
Imports from Canada & Mexico	26,110	38,837	52,219	40,713	45,901	42,219	38,668
Total Kilowatthours	**2,900,868**	**2,917,339**	**2,770,955**	**2,640,031**	**2,614,220**	**2,530,043**	**2,406,631**
DISPOSITION							
Total Sales to Ultimate Customers	2,618,356	2,556,266	2,435,483	2,354,744	2,305,882	2,280,585	2,159,787
Exports to Canada & Mexico	15,135	7,067	5,881	4,816	4,965	2,558	3,337
Energy Used by Producer	3,098	1,353	2,112	1,247	1,833	2,849	2,633
Company Use & Free Service	9,789	7,351	8,401	8,536	9,336	10,958	10,650
Lost and Unaccounted For	254,490	241,250	225,097	199,399	222,026	180,968	188,195
Industrials*	N/A	104,052	93,981	71,289	70,178	52,125e	42,029e
Total Kilowatthours	**2,900,868**	**2,917,339**	**2,770,955**	**2,640,031**	**2,614,220**	**2,530,043**	**2,406,631**

	1982	1981	1980	1979	1978	1977	1976
SOURCE							
Generation							
Total Electric Utility Industry	2,241,211	2,294,812	2,286,414	2,247,359	2,206,313	2,124,166	2,037,674
Industrials*	49,072e	56,045e	60,369e	65,341	72,297	83,543	82,406
Industrials*—Received by Electric Utility Industry	12,004	8,401	7,576	6,034	6,670	4,032	4,678
Total Generation	**2,302,287**	**2,359,258**	**2,354,359**	**2,318,734**	**2,285,280**	**2,211,741**	**2,124,758**
Imports from Canada & Mexico	34,284	35,416	25,021	22,516	21,514	20,159	10,989
Total Kilowatthours	**2,336,571**	**2,394,674**	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**	**2,135,747**
DISPOSITION							
Total Sales to Ultimate Customers	2,009,741	2,150,674	2,126,094	2,084,400	2,017,818	1,950,791	1,849,625
Exports to Canada & Mexico	3,540	1,832	4,096	2,182	2,186	2,744	2,378
Energy Used by Producer	2,539	1,462	2,540	3,382	2,372	2,462	2,559
Company Use & Free Service	12,051	10,068	9,053	11,086	7,975	7,037	5,717
Lost and Unaccounted For	169,628	174,593	177,228	174,859	204,146	185,323	193,062
Industrials*	49,072e	56,045e	60,369e	65,341	72,297	83,543	82,406
Total Kilowatthours	**2,336,571**	**2,394,674**	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**	**2,135,747**

	1975	1974	1973	1972	1971	1970	1969
SOURCE							
Generation							
Total Electric Utility Industry	1,917,619	1,866,436	1,856,216	1,749,637	1,612,589	1,531,609	1,442,182
Industrials*	79,340	94,955	95,761	98,241	96,495	102,440	105,203
Industrials*—Received by Electric Utility Industry	6,022	6,617	6,768	6,267	6,744	5,722	5,372
Total Generation	**2,002,981**	**1,968,008**	**1,958,745**	**1,854,145**	**1,715,828**	**1,639,771**	**1,552,757**
Imports from Canada & Mexico	11,268	15,420	16,848	10,496	7,043	6,169	4,902
Total Kilowatthours	**2,014,249**	**1,983,428**	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**	**1,557,659**
DISPOSITION							
Total Sales to Ultimate Customers	1,733,024	1,700,769	1,703,203	1,577,714	1,466,441	1,391,359	1,307,178
Exports to Canada & Mexico	5,083	2,726	2,570	2,752	3,514	4,209	3,830
Energy Used by Producer	3,068	3,059	3,137	3,081	2,854	2,301	2,515
Company Use & Free Service	4,709	4,850	4,912	4,412	3,894	3,984	3,626
Lost and Unaccounted For	189,025	177,069	166,010	178,441	149,673	141,647	135,307
Industrials*	79,340	94,955	95,761	98,241	96,495	102,440	105,203
Total Kilowatthours	**2,014,249**	**1,983,428**	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**	**1,557,659**

N/A Not Available.

**Includes non-electric utility industry facilities.*

p Preliminary. r Revised. e Estimated.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759), Economic Regulatory Administration, Electricity Transactions Across International Borders, and Edison Electric Institute.

TABLE 10

WORLD POWER DATA

FIFTEEN COUNTRIES WITH GREATEST INSTALLED GENERATING CAPACITY

1988

	Installed Capacity (Kilowatts in Thousands)				Energy Production† (kWh in Millions)					
Country	Hydro	Nuclear	Thermal	Total	Hydro	Nuclear	Thermal	Total	Population (Thousands)	kWh Per Capita
United States	88,613	103,397	563,842	755,852	229,114	526,901	2,100,609	2,856,624	245,785‡	11,622
U.S.S.R.	63,500	35,400	231,600	330,500	229,100	216,000	1,253,300	1,698,400	287,015	5,917
Japan	37,291	28,866	115,551	181,708	95,885	178,659	479,184	753,728	123,231	6,116
Canada	57,464	12,586	30,934	100,984	306,582	82,867	114,836	504,285	25,334	19,905
France	24,651	52,430	23,536	100,617	78,782	275,521	37,623	391,926	55,842	7,018
Germany (West)	6,854	21,488	68,149	96,491	18,406	145,082	265,368	428,856	60,162	7,128
China (mainland)	29,000	—	66,000	95,000	106,596	—	431,250	537,846	1,069,628	503
United Kingdom	4,164	7,638	57,619	69,421	6,965	63,456	237,809	308,230	60,382	5,105
India	18,003	1,330	43,900	63,233	51,944	5,507	180,349	237,800	833,422	285
Italy	17,939	1,120	37,685	56,744	40,676	0	160,014	200,690	57,462	3,493
Brazil	41,692	657	6,731	49,080	199,093	608	14,416	214,117	153,992	1,390
Spain	15,279	7,600	20,618	43,497	36,139	50,379	51,993	138,511	39,784	3,482
Australia	7,268	—	26,820	34,088	14,363	—	124,993	139,356	16,090	8,661
Sweden	16,700	9,700	7,355	33,755	70,434	69,611	6,489	146,534	8,371	17,505
Poland	1,976	—	28,946	30,922	4,204	—	140,168	144,372	38,389	3,761

† *Data presented on a gross generation basis.*

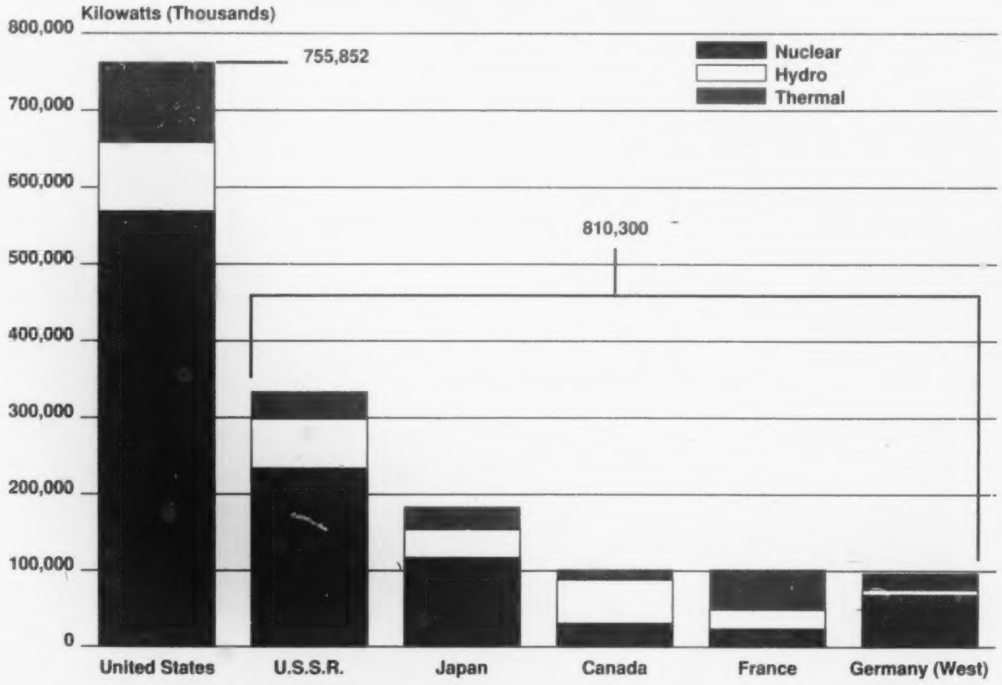
‡ *U.S. population July 1, 1988; excludes armed forces abroad. Dept. of Commerce, Bureau of Census.*

Sources: Capacity and production: UN 1988 Energy Statistics Yearbook; *population (except as noted):* The World Almanac and Book of Facts—*1990.*

CHART II-B

WORLD GENERATING CAPACITY

SIX LARGEST COUNTRIES -1988



Based on Table 10, as shown above.

Source: UN 1988 Energy Statistics Yearbook.

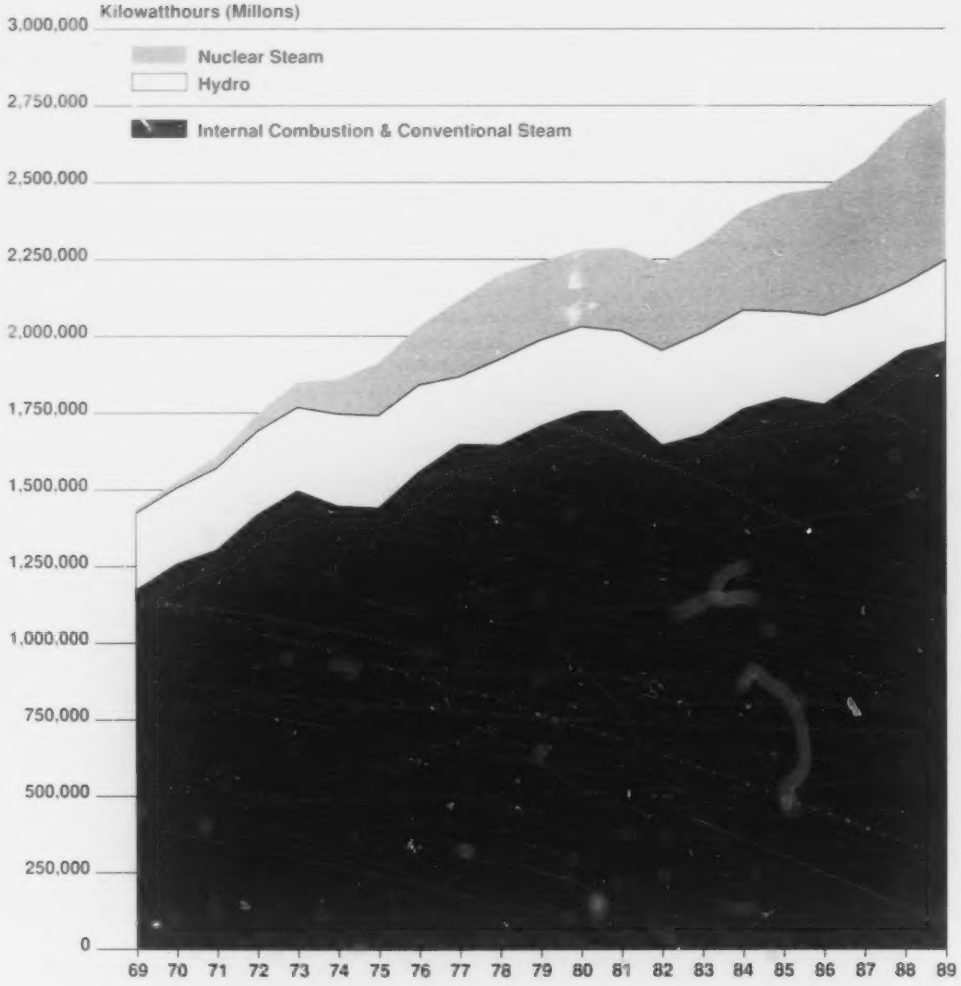
SECTION III

GENERATION

CHART III-A

GENERATION BY TYPE OF PRIME MOVER

TOTAL ELECTRIC UTILITY INDUSTRY



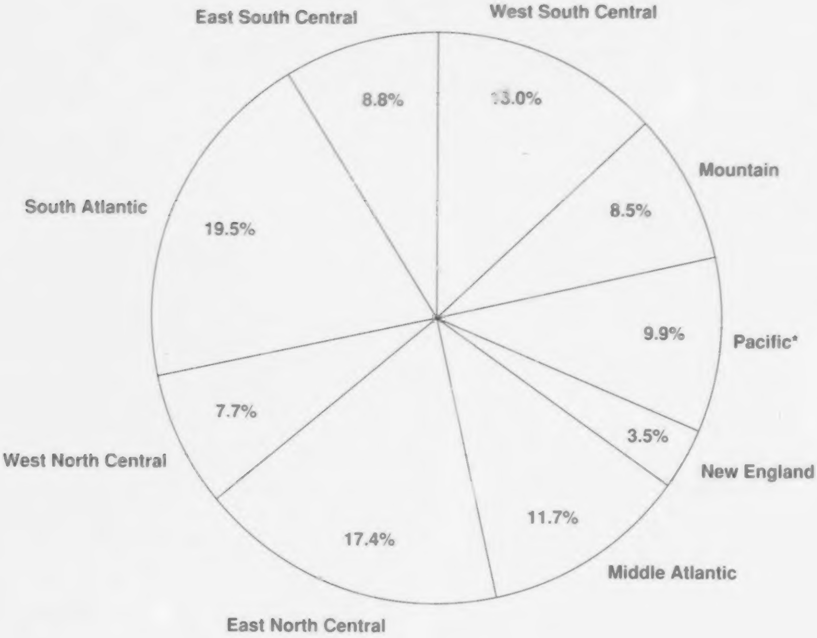
Based on table 12, page 20

Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759)*

CHART III-B

GENERATION BY CENSUS DIVISIONS

TOTAL ELECTRIC UTILITY INDUSTRY
1[illegible]



* Includes Alaska and Hawaii.
Based on table 15 page 24.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759)*.

TABLE 12

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
TOTAL (Generation by All Types of Prime Mover)							
1989p	**2,780,775**	**2,188,497**	**122,810**	**469,468**	**100,225**	**223,531**	**145,711**
1988r	2,704,250	2,145,601	123,079	435,571	96,539	201,125	137,907
1987	2,572,127	2,022,260	122,508	427,359	86,211	205,363	135,736
1986	2,487,310	1,928,199	113,897	445,214	78,869	224,854	141,491
1985	2,469,841	1,918,032	108,321	443,488	73,864	233,063	136,560
1984	2,416,304	1,848,916	101,970	465,418	74,672	253,928	136,818
1983	2,310,285	1,764,080	84,710	461,495	73,069	258,181	130,245
1982	2,241,211	1,711,576	77,098	452,537	76,569	241,004	134,964
1981	2,294,812	1,785,500	73,314	435,998	80,701	232,222	123,075
1980	2,286,414	1,782,933	63,550	439,931	86,579	235,051	118,301
1979	2,247,359	1,756,170	54,404	436,785	87,265	235,570	113,950
1978	2,206,313	1,721,163	48,717	436,433	89,700	235,257	111,476
1977	2,124,166	1,684,084	44,884	395,198	83,382	213,633	98,183
1976	2,037,674	1,582,029	41,223	414,422	78,176	236,024	100,222
1975	1,917,619	1,486,844	35,328	395,447	81,518	221,226	92,703
1974	1,866,436	1,442,114	33,844	390,478	78,677	219,821	91,980
1973	1,856,216	1,448,860	35,127	372,229	80,872	211,715	79,642
1972	1,749,637	1,358,929	31,714	358,994	78,931	206,668	73,395
1971	1,612,589	1,248,596	27,227	336,766	72,609	194,462	69,695
1970	1,531,609	1,183,190	23,459	324,960	71,394	185,753	67,813
1969	1,442,182	1,102,162	17,513	322,507	69,614	183,245	69,648
HYDRO (Generation of Generators Driven by Water Wheels and Turbines)							
1989p	**265,061**	**66,575**	**600**	**197,886**	**14,808**	**131,027**	**52,051**
1988r	222,940	48,725	396	173,819	12,644	112,015	49,160
1987	249,695	58,253	398	191,044	12,285	124,680	54,079
1986	290,844	71,356	396	219,091	16,841	141,990	60,260
1985	281,149	66,334	410	214,406	14,496	142,435	57,475
1984	321,150	83,639	279	237,232	15,775	162,268	59,190
1983	332,130	88,663	303	243,164	17,266	160,989	64,910
1982	309,213	81,527	294	227,392	17,061	148,027	62,305
1981	260,684	61,680	231	198,773	13,700	128,690	56,383
1980	276,039	70,500	267	205,272	15,603	131,909	57,760
1979	279,790	74,105	244	205,441	13,270	137,212	54,959
1978	280,432	72,381	275	207,776	14,889	136,804	56,083
1977	220,446	55,343	220	164,883	8,572	111,951	44,360
1976	283,734	68,034	221	215,479	14,444	144,218	56,817
1975	300,065	81,524	251	218,290	16,619	142,943	58,728
1974	300,928	81,204	197	219,527	17,218	137,882	64,427
1973	271,634	77,451	229	193,954	13,439	123,148	57,367
1972	272,626	76,820	220	195,586	15,152	126,328	54,106
1971	266,314	76,521	243	189,550	14,765	121,573	53,212
1970	247,456	70,587	214	176,655	14,453	110,695	51,507
1969	250,193	74,833	215	175,145	15,494	105,687	53,964
CONVENTIONAL STEAM (Generation of Generators Driven by Steam Engines and Turbines)							
1989p	**1,984,478**	**1,633,992**	**122,055**	**228,431**	**83,078**	**77,012**	**68,341**
1988r	1,952,566	1,599,747	122,552	230,267	80,152	85,266	64,848
1987	1,865,463	1,531,106	121,845	212,512	73,082	80,890	58,540
1986	1,780,853	1,469,751	113,219	197,883	61,198	83,092	53,593
1985	1,803,323	1,503,349	107,438	192,536	56,543	77,976	58,017
1984	1,765,608	1,487,840	101,184	176,584	54,008	66,989	55,587
1983	1,682,268	1,426,449	84,015	171,804	51,503	69,237	51,063
1982	1,646,883	1,396,336	76,481	174,066	54,507	65,682	53,878
1981	1,758,660	1,492,062	72,619	193,980	62,421	80,715	50,844
1980	1,755,634	1,499,918	62,803	192,913	63,899	83,715	45,299
1979	1,708,256	1,472,652	53,609	181,995	65,100	77,948	38,947
1978	1,644,756	1,415,266	47,887	181,603	66,212	81,535	33,856
1977	1,648,105	1,422,684	44,193	181,228	65,402	83,202	32,624
1976	1,557,647	1,346,179	38,409	173,059	57,547	87,584	27,928
1975	1,439,374	1,249,623	33,647	156,104	57,958	75,549	22,597
1974	1,445,808	1,261,009	32,887	151,912	56,605	75,640	19,667
1973	1,494,901	1,292,888	34,108	167,905	62,422	88,240	17,243
1972	1,416,218	1,229,998	30,713	155,507	58,814	80,324	16,369
1971	1,301,960	1,135,674	26,245	140,041	53,246	72,866	13,929
1970	1,256,294	1,092,564	22,610	141,120	52,380	75,048	13,692
1969	1,172,481	1,016,361	16,760	139,360	49,800	77,544	12,016

See page 21 for footnotes.

TABLE 12 (continued)

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
NUCLEAR STEAM (Generation of Generators Driven by Nuclear Reactors)							
1989p	**529,355**	**487,114**	**—**	**42,240**	**1,429**	**15,492**	**25,319**
1988r	526,973	496,367	—	30,606	2,864	3,844	23,897
1987	455,270	432,239	129	22,902	(57)	(207)	23,166
1986	414,038	386,513	157	27,367	(41)	(230)	27,638
1985	383,691	347,769	323	35,599	1,885	12,646	21,069
1984	327,634	276,849	319	50,466	3,760	24,665	22,040
1983	293,677	248,379	201	45,097	2,875	27,951	14,271
1982	282,773	233,213	137	49,423	3,349	27,294	18,780
1981	272,674	231,190	241	41,243	2,585	22,810	15,847
1980	251,121	211,831	214	39,076	4,426	19,413	15,237
1979	255,155	208,788	201	46,166	5,729	20,402	20,035
1978	276,403	232,742	174	43,487	5,046	16,911	21,530
1977	250,882	205,257	89	45,536	5,865	18,473	21,198
1976	191,107	167,098	2,157	21,852	2,161	4,214	15,477
1975	172,506	154,985	951	16,570	2,470	2,722	11,378
1974	113,727	99,042	313	14,372	198	6,289	7,885
1973	83,334	77,790	199	5,345	—	314	5,031
1972	54,092	50,933	240	2,919	—	—	2,919
1971	38,106	35,357	196	2,553	—	—	2,553
1970	21,797	19,063	120	2,614	—	—	2,614
1969	13,928	10,261	—	3,667	—	—	3,667
INTERNAL COMBUSTION (Generation of Generators Driven by Internal Combustion Engines)							
1989p	**1,878**	**815**	**155**	**908**	**907**	**—**	**1**
1988r	1,762	753	130	878	877	—	1
1987	1,685	649	136	900	899	—	1
1986	1,556	565	124	867	866	—	*
1985	1,662	570	150	942	938	4	*
1984	1,901	579	188	1,133	1,130	3	*
1983	2,207	588	190	1,429	1,425	3	1
1982	2,343	50[illegible]	186	1,656	1,653	2	1
1981	2,795	5[illegible]	224	2,003	1,995	7	1
1980	3,620	[illegible]	266	2,670	2,651	14	5
1979	4,158	6[illegible]	350	3,183	3,166	8	9
1978	4,722	774	381	3,567	3,553	7	7
1977	4,733	800	382	3,551	3,543	7	1
1976	5,186	718	436	4,032	4,024	8	—
1975	5,674	712	479	4,483	4,471	12	—
1974	5,973	859	447	4,667	4,656	10	1
1973	6,347	731	591	5,025	5,011	13	1
1972	6,701	1,178	541	4,982	4,965	16	1
1971	6,209	1,044	543	4,622	4,598	23	1
1970	6,062	976	515	4,571	4,561	10	—
1969	5,580	707	538	4,335	4,320	14	1
WIND† (Generation of Generators Driven by Wind Turbines)							
1989p	*	*	**—**	*	**—**	*	**—**
1988r	1	1	—	(*)	—	(*)	—
1987	4	4	—	(*)	—	(*)	—
1986	4	3	—	1	—	1	—
1985	6	3	—	3	—	3	—
1984	7	4	—	3	—	3	—
1983	3	2	—	1	—	1	—
SOLAR‡ (Generation of Generators Driven by Photovoltaic and Solar Thermal Energy)							
1989p	**3**	*	**—**	**2**	**2**	**—**	**—**
1988r	9	8	—	1	1	—	—
1987	11	8	—	2	2	—	—
1986	14	10	—	4	4	—	—
1985	11	9	—	2	2	—	—
1984	5	5	—	*	*	—	—

Note: Total may not equal sum of components due to independent rounding.

† Prior to 1983 generation by wind not available.

‡ Prior to 1984 generation by solar not available.

p Preliminary. r Revised.

( ) Denotes negative figure.

** Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 13

GENERATION PER KILOWATT OF INSTALLED NAME PLATE CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS

Year	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned
		TOTAL				HYDRO		
1989p	**3,823**	**3,908**	**4,657**	**3,328**	**3,040**	**2,244**	**3,550**	**3,450**
1988r	3,751	3,864	4,667	3,127	2,580	1,656	2,809	3,058
1987	3,608	3,687	4,641	3,097	2,919	2,005	3,476	3,389
1986	3,562	3,589	4,466	3,288	3,459	2,525	3,600	3,932
1985	3,629	3,670	4,393	3,327	3,437	2,471	4,432	3,908
1984	3,632	3,624	4,345	3,535	4,025	3,273	3,444	4,381
1983	3,532	3,512	3,880	3,550	4,228	3,578	3,741	4,529
1982	3,489	3,458	3,868	3,547	3,983	3,334	3,973	4,281
1981	3,676	3,690	4,335	3,533	3,396	2,541	3,448	3,792
1980	3,773	3,789	4,344	3,641	3,639	2,929	3,985	3,968
1979	3,816	3,827	4,272	3,725	3,823	3,103	3,642	4,173
1978	3,872	3,859	4,326	3,877	4,013	3,080	4,104	4,486
1977	3,892	3,945	4,308	3,646	3,230	2,391	3,284	3,660
1976	3,920	3,884	4,320	4,024	4,244	2,942	3,299	4,935
1975	3,895	3,836	4,254	4,102	4,634	3,556	4,149	5,226
1974	4,075	3,991	4,585	4,371	4,802	3,649	3,582	5,439
1973	4,427	4,385	5,021	4,545	4,597	3,788	4,164	5,027
1972	4,557	4,510	5,210	4,693	4,855	4,022	4,074	5,287
1971	4,541	4,532	5,122	4,534	4,800	4,035	4,418	5,198
1970	4,681	4,707	4,949	4,570	4,591	3,785	3,821	5,018
1969	4,772	4,783	4,518	4,749	4,815	4,069	3,805	5,226
		STEAM				INTERNAL COMBUSTION		
1989p	**3,972**	**4,028**	**4,711**	**3,367**	**259**	**223**	**527**	**275**
1988r	3,949	4,009	4,726	3,298	267	255	438	261
1987	3,736	3,798	4,695	3,008	277	265	456	270
1986	3,606	3,661	4,520	2,946	284	290	398	270
1985	3,683	3,744	4,446	3,032	338	410	460	294
1984	3,605	3,652	4,399	3,055	386	414	593	354
1983	3,463	3,519	3,928	2,966	436	377	608	448
1982	3,449	3,477	3,924	3,139	437	285	554	506
1981	3,748	3,764	4,417	3,478	501	303	638	598
1980	3,625	3,849	4,433	3,528	655	372	764	800
1979	3,849	3,881	4,381	3,527	753	347	903	956
1978	3,885	3,916	4,446	3,578	872	457	992	1,069
1977	4,022	4,048	4,423	3,777	893	487	1,129	1,070
1976	3,906	3,956	4,437	3,478	1,000	454	1,313	1,233
1975	3,815	3,868	4,375	3,358	1,127	479	1,423	1,396
1974	3,995	4,029	4,756	3,629	1,206	592	1,294	1,478
1973	4,441	4,444	5,200	4,298	1,300	478	1,723	1,668
1972	4,551	4,563	5,440	4,318	1,434	778	1,577	1,769
1971	4,540	4,589	5,377	4,063	1,406	769	1,578	1,702
1970	4,751	4,803	5,234	4,321	1,417	751	1,510	1,733
1969	4,820	4,869	4,819	4,493	1,364	593	1,575	1,695

p Preliminary. *r Revised.*

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report (EIA-759). Annual Electric Generator Report (EIA-860), and Annual Electric Utility Report (EIA-861), *as shown in Tables 2 and 12.*

TABLE 14

GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

Year	Investor-Owned	Cooperatives	Government-Owned	Total	Investor-Owned	Cooperatives	Government-Owned	Total	Investor-Owned	Cooperatives	Government-Owned
	TOTAL			HYDRO				CONVENTIONAL STEAM			
1989p	**78.7%**	**4.4%**	**16.9%**	**9.5%**	**2.4%**	***%**	**7.1%**	**71.4%**	**58.8%**	**4.4%**	**8.2%**
1988r	79.3	4.6	16.1	8.2	1.8	*	6.4	72.2	59.2	4.5	8.5
1987	78.6	4.8	16.6	9.7	2.3	*	7.4	72.5	59.5	4.7	8.3
1986	77.5	4.6	17.9	11.7	2.9	*	8.8	71.6	59.1	4.5	8.0
1985	77.7	4.4	17.9	11.4	2.7	*	8.7	73.0	60.9	4.3	7.8
1984	76.5	4.2	19.3	13.3	3.5	*	9.8	73.1	61.6	4.2	7.3
1983	76.4	3.6	20.0	14.4	3.9	*	10.5	72.8	61.7	3.6	7.5
1982	76.4	3.4	20.2	13.8	3.7	*	10.1	73.5	62.3	3.4	7.8
1981	77.8	3.2	19.0	11.4	2.7	*	8.7	76.6	65.0	3.2	8.4
1980	78.0	2.8	19.2	12.1	3.1	*	9.0	76.8	65.6	2.8	8.4
1979	78.1	2.4	19.5	12.4	3.3	*	9.1	76.0	65.5	2.4	8.1
1978	78.0	2.2	19.8	12.7	3.3	*	9.4	74.6	64.2	2.2	8.2
1977	79.3	2.1	18.6	10.4	2.6	*	7.8	77.6	67.0	2.1	8.5
1976	77.7	2.0	20.3	13.9	3.3	*	10.6	76.4	66.1	1.9	8.4
1975	77.5	1.9	20.6	15.6	4.2	*	11.4	75.1	65.2	1.8	8.1
1974	77.3	1.8	20.9	16.1	4.4	*	11.7	77.5	67.6	1.8	8.1
1973	78.1	1.9	20.0	14.6	4.2	*	10.4	80.6	69.7	1.9	9.0
1972	77.7	1.8	20.5	15.6	4.4	*	11.2	80.9	70.3	1.8	8.8
1971	77.4	1.7	20.9	16.5	4.7	*	11.8	80.7	70.4	1.7	8.6
1970	77.3	1.5	21.2	16.2	4.7	*	11.5	82.0	71.3	1.5	9.2
1969	76.4	1.2	22.4	17.3	5.2	*	12.1	81.3	70.4	1.2	9.7
				NUCLEAR STEAM				INTERNAL COMBUSTION			
1989p				**19.0%**	**17.5%**	**—%**	**1.5%**	**0.1%**	***%**	***%**	***%**
1988r				19.5	18.4	—	1.1	0.1	*	*	*
1987				17.7	16.8	*	0.9	0.1	*	*	*
1986				16.6	15.5	*	1.1	0.1	*	*	*
1985				15.5	14.1	*	1.4	0.1	*	*	*
1984				13.5	11.4	*	2.1	0.1	*	*	0.1
1983				12.7	10.8	*	1.9	0.1	*	*	0.1
1982				12.6	10.4	*	2.2	0.1	*	*	0.1
1981				11.9	10.1	*	1.8	0.1	*	*	0.1
1980				11.0	9.3	*	1.7	0.1	*	*	0.1
1979				11.4	9.3	*	2.1	0.2	*	*	0.2
1978				12.5	10.5	*	2.0	0.2	*	*	0.2
1977				11.8	9.7	*	2.1	0.2	*	*	0.2
1976				9.4	8.2	0.1	1.1	0.3	0.1	*	0.2
1975				9.0	8.0	0.1	0.9	0.3	0.1	*	0.2
1974				6.1	5.3	*	0.8	0.3	*	*	0.3
1973				4.5	4.2	*	0.3	0.3	*	*	0.3
1972				3.1	2.9	*	0.2	0.4	0.1	*	0.3
1971				2.4	2.2	*	0.2	0.4	0.1	*	0.3
1970				1.4	1.2	*	0.2	0.4	0.1	*	0.3
1969				1.0	0.7	—	0.3	0.4	0.1	*	0.3

Note: Total may not equal sum of components due to independent rounding.

p Preliminary. r Revised.

**Less than one tenth of one percent.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759), as shown in Table 12.*

TABLE 15

GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1988r and 1989p—KILOWATTHOURS IN MILLIONS

	Total Electric Utility Industry†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1989p	1988r	1989p	1988r	1989p	1988r	1989p	1988r	1989p	1988r
Total United States	**2,780,775**	**2,704,250**	**265,061**	**222,940**	**1,984,478**	**1,952,566**	**529,355**	**526,973**	**1,878**	**1,762**
Maine	11,624	9,530	1,681	1,569	2,993	2,935	6,942	5,017	8	9
New Hampshire	7,125	6,997	1,089	968	6,037	6,030	—	—	—	—
Vermont	4,761	5,049	948	809	203	123	3,607	4,114	4	4
Massachusetts	39,158	34,664	226	150	35,750	33,234	3,015	1,117	166	163
Rhode Island	496	764	—	—	478	742	—	—	18	22
Connecticut	34,277	36,379	390	324	14,321	13,797	19,563	22,251	3	6
New England	**97,441**	**93,383**	**4,334**	**3,819**	**59,782**	**56,860**	**33,126**	**32,499**	**199**	**205**
New York	130,454	124,714	23,918	23,901	83,618	76,561	22,847	24,175	70	76
New Jersey	41,109	40,160	(261)	(222)	18,337	16,491	23,032	23,890	1	1
Pennsylvania	154,790	152,932	1,290	705	114,327	114,359	39,166	37,862	8	6
Middle Atlantic	**326,353**	**317,806**	**24,947**	**24,384**	**216,282**	**207,411**	**85,045**	**85,928**	**79**	**83**
Ohio	131,432	124,034	130	187	118,634	115,383	12,661	8,455	7	10
Indiana	88,563	83,954	450	441	88,105	83,505	—	—	8	7
Illinois	126,841	123,340	50	48	51,931	54,071	74,820	69,166	41	55
Michigan	91,518	88,868	749	483	69,382	70,482	21,312	17,808	75	95
Wisconsin	44,361	45,003	1,319	1,230	32,189	32,302	10,848	11,464	6	6
East North Central	**482,715**	**465,198**	**2,698**	**2,389**	**360,239**	**355,743**	**119,641**	**106,893**	**137**	**173**
Minnesota	38,549	40,252	654	532	26,963	27,422	10,926	12,288	5	9
Iowa	28,129	27,729	672	698	24,314	23,857	3,139	3,163	4	11
Missouri	59,382	59,740	1,094	1,511	49,923	49,264	8,344	8,935	21	30
North Dakota	25,705	27,351	1,893	1,884	23,812	25,468	—	—	—	—
South Dakota	6,985	7,886	4,583	5,254	2,402	2,631	—	—	*	*
Nebraska	21,089	20,635	1,158	1,350	11,834	12,439	8,077	6,828	19	18
Kansas	34,222	31,385	10	12	24,278	24,470	9,709	6,650	225	254
West North Central	**214,061**	**214,979**	**10,064**	**11,240**	**163,526**	**165,551**	**40,196**	**37,865**	**275**	**322**
Delaware	8,458	8,953	—	—	8,455	8,944	—	—	2	8
Maryland	35,759	40,384	1,778	1,328	31,185	27,268	2,719	11,734	77	55
District of Columbia	650	469	—	—	650	469	—	—	—	—
Virginia	43,360	45,172	401	(218)	28,687	24,344	14,264	21,037	8	8
West Virginia	82,860	81,314	476	297	82,384	81,017	—	—	—	—
North Carolina	87,103	78,406	6,996	2,890	50,895	46,369	29,212	29,146	—	(*)
South Carolina	66,984	65,183	2,016	631	24,189	23,806	40,780	40,746	*	*
Georgia	92,448	82,375	3,874	2,011	63,615	65,214	24,961	15,149	(3)	—
Florida	124,273	124,053	234	209	102,898	97,499	20,916	26,198	226	147
South Atlantic	**541,895**	**526,309**	**15,775**	**7,149**	**392,958**	**374,931**	**132,852**	**144,010**	**310**	**218**
Kentucky	70,760	76,436	4,404	2,423	66,356	74,013	—	—	—	—
Tennessee	73,959	59,858	11,853	4,591	46,503	51,326	15,603	3,940	—	—
Alabama	77,590	67,518	13,153	5,359	52,913	49,178	11,524	12,981	—	—
Mississippi	21,055	25,093	—	—	13,229	15,510	7,826	9,582	—	—
East South Central	**243,364**	**228,905**	**29,410**	**12,374**	**179,001**	**190,027**	**34,954**	**26,504**	**—**	**—**
Arkansas	33,400	33,764	3,084	2,785	21,471	22,083	8,844	8,895	*	*
Louisiana	52,670	56,774	—	—	40,277	42,985	12,391	13,785	3	3
Oklahoma	44,448	44,035	2,392	2,045	42,028	41,962	—	—	28	29
Texas	232,293	221,180	1,441	1,235	220,830	216,121	9,990	3,792	32	32
West South Central	**362,811**	**355,752**	**6,917**	**6,065**	**324,606**	**323,151**	**31,225**	**26,473**	**62**	**64**
Montana	25,823	24,821	9,550	8,237	16,273	16,582	—	—	*	2
Idaho	8,929	6,746	8,927	6,745	2	*	—	—	*	*
Wyoming	36,751	39,147	680	789	36,071	38,359	—	—	(*)	(*)
Colorado	32,296	30,895	1,703	1,744	30,062	28,488	529	660	2	3
New Mexico	28,349	26,369	232	100	28,116	26,269	—	—	*	*
Arizona	53,125	61,562	7,877	7,771	37,397	30,851	7,850	22,940	1	*
Utah	30,496	29,637	562	593	29,929	29,040	—	—	5	4
Nevada	19,681	20,296	1,859	2,091	17,823	18,206	—	—	(1)	(1)
Mountain	**235,449**	**239,474**	**31,390**	**28,072**	**195,672**	**187,794**	**8,380**	**23,600**	**8**	**9**
Washington	87,121	83,593	71,293	68,379	9,710	9,214	6,118	6,000	*	*
Oregon	44,964	41,048	37,815	34,646	1,849	63	5,299	6,339	—	—
California	132,264	125,981	29,524	23,474	70,196	71,613	32,519	30,863	23	21
Pacific	**264,349**	**250,622**	**138,633**	**126,499**	**81,755**	**80,890**	**43,936**	**43,202**	**23**	**21**
Alaska	4,388	4,195	873	935	3,253	3,039	—	—	262	220
Hawaii	7,949	7,627	22	14	7,405	7,167	—	—	522	446
Alaska & Hawaii	**12,336**	**11,822**	**895**	**950**	**10,658**	**10,206**	**—**	**—**	**783**	**666**

Note: Total may not equal sum of components due to independent rounding.

†Total includes generation by wind (1988r—0.9 kWh in millions; 1989p—0.5 kWh in millions) and generation by solar (1988r—9.1 kWh in millions; 1989p—2.6 kWh in millions).

*p Preliminary. r Revised. ( ) Denotes negative figure. *Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 16

GENERATION

INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

1988r and 1989p—KILOWATTHOURS IN MILLIONS

	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1989p	1988r	1989p	1988r	1989p	1988r	1989p	1988r	1988p	1988r
Total United States	**2,188,497**	**2,145,601**	**66,575**	**48,7[illegible]5**	**1,633,992**	**1,599,747**	**487,114**	**496,367**	**815**	**753**
Maine	11,622	9,528	1,678	1,567	2,993	2,935	6,942	5,017	9	9
New Hampshire	7,125	6,997	1,089	968	6,037	6,030	—	—	—	—
Vermont	4,507	4,886	887	752	10	17	3,607	4,114	3	3
Massachusetts	37,491	33,202	209	128	34,141	31,827	3,015	1,117	126	130
Rhode Island	496	764	—	—	478	742	—	—	18	22
Connecticut	34,258	36,360	377	314	14,317	13,793	19,563	22,251	1	3
New England	**95,500**	**91,737**	**4,240**	**3,728**	**57,976**	**55,344**	**33,126**	**32,499**	**157**	**167**
New York	96,493	89,972	3,884	3,304	80,880	73,554	11,723	13,107	6	8
New Jersey	40,921	39,966	(261)	(222)	18,150	16,297	23,032	23,890	1	1
Pennsylvania	154,690	152,918	1,190	690	114,327	114,359	39,166	37,862	8	6
Middle Atlantic	**292,105**	**282,856**	**4,813**	**3,772**	**213,357**	**204,209**	**73,921**	**74,859**	**15**	**15**
Ohio	130,152	122,717	130	185	117,355	114,068	12,661	8,455	6	9
Indiana	81,714	78,027	450	441	81,260	77,584	—	—	3	2
Illinois	123,982	120,392	50	48	49,112	51,177	74,820	69,166	1	*
Michigan	86,587	83,909	523	247	64,752	65,845	21,312	17,808	(1)	9
Wisconsin	40,094	40,644	1,151	1,076	28,094	28,102	10,848	11,464	1	2
East North Central	**462,529**	**445,689**	**2,304**	**1,998**	**340,574**	**336,777**	**119,641**	**106,893**	**10**	**22**
Minnesota	37,932	39,690	647	525	26,358	26,877	10,926	12,288	*	*
Iowa	26,294	25,761	665	689	22,491	21,909	3,139	3,163	(1)	(*)
Missouri	43,298	44,502	395	583	34,559	34,983	8,344	8,935	(*)	(*)
North Dakota	2,805	2,850	—	—	2,805	2,850	—	—	—	—
South Dakota	2,402	2,628	1	1	2,401	2,627	—	—	*	*
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	29,745	27,349	10	12	20,025	20,687	9,709	6,650	*	*
West North Central	**142,476**	**142,779**	**1,717**	**1,810**	**108,640**	**109,933**	**32,119**	**31,037**	**(*)**	**(*)**
Delaware	7,999	8,496	—	—	7,999	8,496	—	—	—	—
Maryland	35,684	40,332	1,778	1,328	31,185	27,268	2,719	11,734	2	2
District of Columbia	650	469	—	—	650	469	—	—	—	—
Virginia	42,655	44,855	(301)	(532)	28,686	24,344	14,264	21,037	6	6
West Virginia	82,860	81,314	476	297	82,384	81,017	—	—	—	—
North Carolina	85,132	77,737	5,178	2,293	50,742	46,298	29,212	29,146	—	—
South Carolina	54,778	53,988	987	38	13,011	13,205	40,780	40,746	—	—
Georgia	90,407	81,354	1,834	991	63,614	65,214	24,961	15,149	(3)	—
Florida	95,884	98,876	*	*	74,967	72,677	20,916	26,198	1	*
South Atlantic	**496,049**	**487,421**	**9,952**	**4,415**	**353,238**	**338,987**	**132,852**	**144,010**	**6**	**8**
Kentucky	32,611	33,247	450	383	32,161	32,864	—	—	—	—
Tennessee	1,056	425	1,056	425	—	—	—	—	—	—
Alabama	54,469	49,291	6,105	2,393	36,729	33,821	11,636	13,077	—	—
Mississippi	18,547	22,850	—	—	10,721	13,268	7,826	9,582	—	—
East South Central	**106,684**	**105,813**	**7,611**	**3,202**	**79,611**	**79,952**	**19,462**	**22,659**	**—**	**—**
Arkansas	30,514	31,157	199	178	21,471	22,083	8,844	8,895	—	—
Louisiana	43,129	47,392	—	—	30,737	33,606	12,391	13,785	—	*
Oklahoma	32,146	32,333	—	—	32,146	32,333	—	—	*	*
Texas	198,727	187,247	52	52	188,685	183,404	9,990	3,792	(*)	(*)
West South Central	**304,516**	**298,129**	**251**	**230**	**273,040**	**271,426**	**31,225**	**26,473**	*****	*****
Montana	21,461	20,617	5,188	4,033	16,273	16,582	—	—	*	2
Idaho	5,833	4,663	5,831	4,662	2	*	—	—	*	*
Wyoming	26,670	27,238	2	1	26,668	27,237	—	—	(*)	(*)
Colorado	13,662	13,042	101	85	13,028	12,293	529	660	4	5
New Mexico	26,461	24,678	—	—	26,461	24,678	—	—	*	*
Arizona	20,088	31,987	33	36	12,204	9,010	7,850	22,940	1	*
Utah	15,473	15,281	125	97	15,349	15,183	—	—	—	—
Nevada	17,851	18,223	30	18	17,823	18,206	—	—	(1)	(1)
Mountain	**147,499**	**155,729**	**11,309**	**8,932**	**127,806**	**123,190**	**8,380**	**23,600**	**4**	**6**
Washington	13,755	13,193	4,044	3,979	9,710	9,214	—	—	*	*
Oregon	14,133	12,041	7,012	5,738	1,822	(36)	5,299	6,339	—	—
California	105,167	102,453	13,241	10,841	60,814	63,583	31,089	27,999	24	22
Pacific	**133,055**	**127,687**	**24,297**	**20,559**	**72,345**	**72,761**	**36,388**	**34,337**	**24**	**22**
Alaska	136	134	59	66	—	—	—	—	77	68
Hawaii	7,949	7,627	22	14	7,405	7,167	—	—	522	446
Alaska & Hawaii	**8,085**	**7,761**	**82**	**80**	**7,405**	**7,167**	**—**	**—**	**599**	**514**

Note: Total may not equal sum of components due to independent rounding.

†Total includes generation by wind (1988r—0.9 kWh in millions; 1989p—0.4 kWh in millions) and generation by solar (1988r—7.6 kWh in millions; 1989p—0.4 kWh in millions).

p Preliminary. *r Revised.* *( ) Denotes negative figure.* **Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 17

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY AND INVESTOR-OWNED ELECTRIC UTILITIES

BY MONTH AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1986-1989p—KILOWATTHOURS IN MILLIONS

	Total Electric Utility Industry					Investor-Owned Electric Utilities				
Year—Month	Total†	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion	Total†	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion
YEAR—1989p										
January	232,396	20,930	165,002	46,328	136	182,434	4,401	135,499	42,466	69
February	219,711	18,620	162,229	38,725	137	174,520	4,078	134,011	36,367	64
March	226,580	22,642	164,148	39,636	154	180,518	6,743	137,141	36,561	73
April	207,749	24,077	150,043	33,495	133	162,212	7,215	124,126	30,814	58
May	219,820	28,049	153,285	38,339	148	169,257	6,937	126,700	35,564	56
June	235,394	25,881	166,365	42,976	171	183,998	6,578	137,186	40,163	70
July	256,737	22,670	181,536	52,331	200	201,849	5,849	147,951	47,976	73
August	258,336	20,187	183,009	54,948	191	204,528	4,612	149,159	50,684	72
September	226,848	18,919	162,938	44,837	154	179,665	4,265	134,243	41,095	62
October	219,587	20,076	155,819	43,558	134	173,541	5,093	128,980	39,402	66
November	218,980	21,186	154,266	43,399	128	171,849	5,492	126,611	39,676	70
December	258,637	21,823	185,838	50,784	192	204,127	5,312	152,385	46,347	83
Total	2,780,775	265,061	1,984,478	529,355	1,878	2,188,497	66,575	1,633,992	487,114	815
YEAR—1988r										
January	237,897	22,033	171,048	44,658	156	187,492	4,939	140,272	42,209	70
February	216,937	19,105	155,469	42,246	115	171,237	4,520	126,432	40,233	51
March	214,013	19,514	150,470	43,912	116	170,251	4,769	123,539	41,887	55
April	196,000	19,104	136,729	40,067	100	154,898	4,999	112,123	37,728	47
May	208,371	21,238	146,372	40,650	109	163,562	4,901	119,535	39,074	51
June	232,747	18,833	169,657	44,079	176	184,347	3,528	138,800	41,956	62
July	257,461	16,904	190,525	49,828	202	205,816	3,095	156,673	45,978	69
August	267,693	16,447	201,945	49,035	264	215,054	2,987	166,502	45,468	95
September	220,179	16,270	157,501	46,270	136	174,182	3,100	127,682	43,340	59
October	210,608	15,112	152,781	42,591	123	169,026	3,122	125,632	40,209	63
November	209,593	18,466	151,422	39,583	122	165,944	4,616	124,357	36,912	60
December	232,752	19,913	168,645	44,052	142	183,793	4,150	138,198	41,375	70
Total	2,704,250	222,940	1,952,566	526,973	1,762	2,145,601	48,725	1,599,747	496,367	753
YEAR—1987										
January	222,749	25,412	157,231	39,975	132	172,804	5,880	129,174	37,697	53
February	194,034	21,226	136,096	36,598	114	152,083	5,326	111,793	34,914	49
March	201,849	23,248	141,189	37,290	122	159,397	6,749	116,975	35,623	50
April	189,496	22,025	133,834	33,518	117	148,877	6,052	110,428	32,345	51
May	206,074	24,202	147,420	34,320	130	160,451	5,114	121,837	33,441	57
June	225,589	20,863	167,992	36,560	171	178,067	4,151	138,477	35,383	53
July	247,915	20,195	187,443	40,056	219	196,760	4,089	154,111	38,492	66
August	247,645	18,446	187,637	41,352	208	196,592	3,378	153,824	39,326	63
September	213,008	18,180	155,034	39,666	128	168,363	4,101	126,811	37,399	52
October	203,009	17,955	148,452	36,492	110	158,978	3,905	121,388	33,636	49
November	200,258	16,857	145,850	37,438	112	157,596	4,141	118,703	34,701	51
December	220,500	21,087	157,285	42,006	123	172,292	5,368	127,585	39,285	55
Total	2,572,127	249,695	1,865,463	455,270	1,685	2,022,260	58,253	1,531,106	432,239	649
YEAR—1986										
January	217,470	21,377	159,733	36,219	139	170,455	5,696	131,031	33,664	63
February	192,336	23,222	136,288	32,721	104	149,192	6,249	112,985	29,916	41
March	196,834	28,465	137,487	30,773	107	150,144	7,632	113,693	28,777	40
April	186,074	27,523	127,966	30,477	106	141,097	7,114	105,767	28,176	39
May	197,315	27,205	138,065	31,924	118	151,611	6,539	114,682	30,347	42
June	215,015	26,223	157,305	31,334	151	166,336	6,235	130,792	29,262	46
July	242,672	24,072	182,505	35,894	199	189,342	4,980	150,568	33,742	50
August	225,166	21,189	166,337	37,483	155	176,273	4,548	136,719	34,950	55
September	206,692	21,114	148,849	36,593	135	161,017	4,669	122,316	33,977	54
October	197,754	21,335	140,095	36,214	108	154,504	5,464	114,960	34,034	44
November	196,432	23,153	138,220	34,944	114	153,142	5,779	114,446	32,872	43
December	213,551	25,965	148,002	39,463	120	165,086	6,452	121,791	36,796	48
Total	2,487,310	290,844	1,780,853	414,038	1,556	1,928,199	71,356	1,469,751	386,513	565

Note: Total may not equal sum of components due to independent rounding.
† *Includes generation by wind and solar. See Table 12 for details.*
p Preliminary. *r Revised.*
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 18

INDEX OF WEEKLY ELECTRIC OUTPUT
TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)
SEASONALLY ADJUSTED—1967 AVERAGE = 100
1979-1989

Week Number	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
1	239	224	208	212	199	201	169	176	180	179	199
2	229	234	204	210	202	192	174	179	189	178	192
3	219	232	202	199	207	204	176	205	197	170	189
4	217	216	213	194	219	195	188	193	185	176	186
5	221	228	219	215	209	190	182	190	182	194	201
6	252	221	200	196	213	190	177	183	191	190	198
7	233	235	208	220	206	177	186	192	192	188	196
8	247	233	223	210	200	187	183	182	176	185	194
9	242	228	221	216	201	206	184	193	187	200	196
10	247	221	212	213	206	207	185	196	193	204	191
11	232	222	217	206	202	205	186	194	192	196	194
12	238	237	218	213	207	202	189	192	198	195	189
13	229	228	209	203	204	195	201	195	195	196	193
14	240	224	223	201	204	203	195	195	189	191	194
15	240	225	216	208	204	203	196	201	193	188	193
16	234	225	211	210	205	202	200	193	195	195	191
17	238	227	216	213	215	206	191	192	195	188	188
18	238	222	219	214	211	206	191	187	198	187	186
19	229	225	219	216	213	208	191	187	193	187	196
20	230	229	221	215	216	205	190	189	192	185	188
21	244	227	226	208	208	208	190	192	188	182	181
22	242	219	227	214	212	199	187	187	192	185	181
23	229	238	228	217	222	214	188	191	198	193	191
24	224	236	220	218	212	220	198	187	204	180	183
25	233	252	235	213	203	215	193	182	205	179	184
26	232	228	230	217	206	209	194	179	200	192	177
27	239	224	223	213	201	205	190	179	194	192	173
28	238	265	226	219	214	212	200	190	202	197	182
29	222	233	211	212	198	192	201	182	195	202	184
30	238	235	232	217	196	194	199	190	194	194	189
31	238	252	230	215	194	192	202	187	185	194	193
32	217	249	232	203	197	206	199	189	192	204	198
33	227	253	223	205	211	214	207	186	198	201	173
34	238	235	234	214	202	206	215	190	186	196	184
35	244	222	212	196	200	207	205	184	188	194	185
36	235	218	209	194	215	196	211	196	197	201	192
37	245	222	222	207	218	213	204	177	187	200	188
38	234	234	229	210	203	199	195	196	193	198	181
39	227	228	219	230	207	206	189	182	189	203	186
40	234	222	222	236	205	197	197	184	195	192	191
41	239	225	216	215	208	202	194	192	194	186	190
42	243	228	215	210	212	206	198	184	194	188	192
43	235	231	216	207	209	207	197	186	194	189	193
44	237	231	218	207	206	208	197	185	193	194	191
45	237	229	215	213	209	205	199	186	188	187	190
46	234	225	218	221	208	206	201	184	188	188	191
47	236	221	221	222	214	204	191	191	192	201	177
48	243	233	212	207	209	208	205	179	187	190	194
49	245	227	213	213	215	212	199	174	184	184	188
50	257	241	212	219	211	199	195	179	189	185	181
51	267	220	220	213	221	191	212	189	196	192	189
52	255	223	215	209	215	190	229	186	198	199	174
Year	**237**	**218**	**211**	**208**	**202**	**195**	**184**	**192**	**191**	**189**	**183**

Note: Seasonal factors are always based on 52 weeks ending on Saturday. Therefore one week is eliminated in 1983 and 1988, since those years had 53 Saturdays.

The above values are based on EEI Weekly Electric Output Index—(Revised Methodology) dated January, 1958.

TABLE 19

WEEKLY ELECTRIC OUTPUT—TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)
1987-1989—KILOWATTHOURS IN MILLIONS

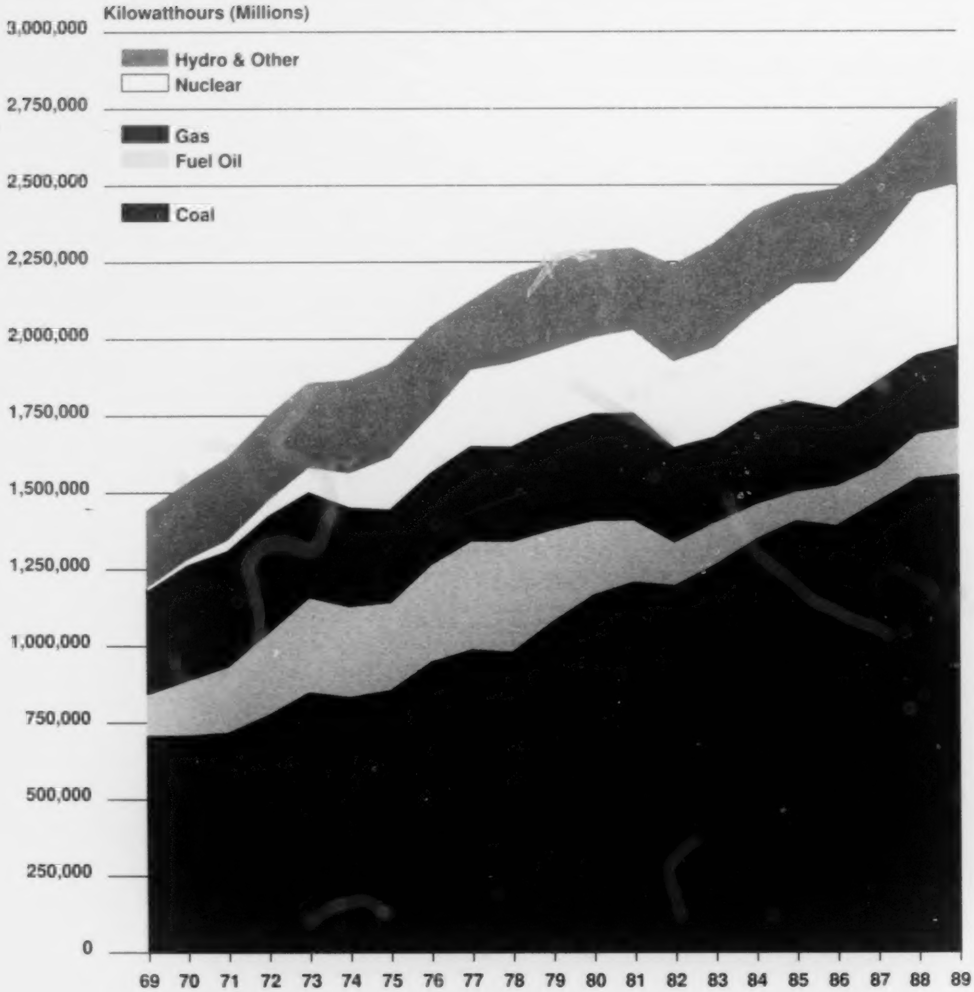
Week Ended	1989	Week Ended	1988	Percent Change 89/88	Week Ended	1987	Percent Change 88/87
		Jan. 2	50,925		Jan. 3	47,420	7.4
Jan. 7	53,862	9	58,056	(7.2)	10	50,921	14.0
14	56,080	16	58,251	(3.7)	17	51,333	13.5
21	54,443	23	53,713	1.4	24	53,867	(0.3)
28	53,720	30	55,822	(3.8)	31	54,077	3.2
Feb. 4	53,749	Feb. 6	53,718	0.1	Feb. 7	49,594	8.3
11	60,378	13	56,388	7.1	14	50,131	12.5
18	55,247	20	52,837	4.6	21	51,096	3.4
25	55,761	27	52,159	6.9	28	50,075	4.2
Mar. 4	54,857	Mar. 5	50,379	8.9	Mar. 7	47,967	5.0
11	55,640	12	49,347	12.8	14	48,305	2.2
18	51,187	19	51,926	(1.4)	21	47,474	9.4
25	51,637	26	49,335	4.7	28	45,561	8.3
Apr. 1	49,132	Apr. 2	47,376	3.7	Apr. 4	47,681	(0.6)
8	50,692	9	46,803	8.3	11	45,955	3.8
15	50,653	16	47,706	6.2	18	44,869	6.3
22	49,205	23	47,678	3.2	25	45,536	5.7
29	50,603	30	48,109	5.2			
					May 2	46,419	2.1
May 6	50,803	May 7	47,371	7.2	9	46,849	3.5
13	49,583	14	48,507	2.2	16	48,064	4.2
20	50,362	21	50,076	0.6	23	49,857	0.2
27	54,702	28	49,940	9.5	30	49,922	2.0
June 3	54,123	June 4	50,944	6.2	June 6	52,952	(1.0)
10	54,446	11	52,418	3.9	13	52,725	7.2
17	54,477	18	56,520	(3.6)	20	56,914	7.9
24	58,148	25	61,424	(5.3)	27	56,373	0.1
July 1	58,699	July 2	56,452	4.0	July 4	52,808	9.1
8	57,848	9	57,593	0.4	11	57,302	9.8
15	62,240	16	62,889	(1.0)	18	56,228	10.6
22	59,161	23	62,180	(4.9)	25	60,564	1.5
29	63,206	30	61,461	2.8			
					Aug. 1	59,685	9.6
Aug. 5	62,586	Aug. 6	65,424	(4.3)	8	60,700	7.7
12	57,467	13	65,358	(12.1)	15	57,661	12.0
19	58,037	20	64,582	(10.1)	22	59,117	(0.4)
26	60,324	27	58,908	2.4	29	54,284	2.3
Sept. 2	60,615	Sept. 3	55,555	9.1	Sept. 5	51,362	(1.5)
9	56,357	10	50,614	11.3	12	51,078	4.8
16	56,630	17	53,523	5.8	19	51,768	2.5
23	53,091	24	53,072	0.0	26	47,776	5.7
30	49,976						
		Oct. 1	50,513	(1.1)	Oct. 3	47,475	1.5
Oct. 7	50,637	8	48,164	5.1	10	46,008	4.1
14	49,959	15	47,882	4.3	17	45,904	5.5
21	50,781	22	48,440	4.8	24	46,330	6.0
28	49,313	29	49,095	0.4	31	46,974	5.3
Nov. 4	50,098	Nov. 5	49,455	1.3	Nov. 7	46,441	6.7
11	50,513	12	49,552	1.9	14	48,269	3.9
18	51,419	19	50,173	2.5	21	48,644	0.7
25	51,471	26	49,001	5.0	28	46,997	10.4
Dec. 2	53,394	Dec. 3	51,873	2.9	Dec. 5	50,330	6.5
9	56,872	10	53,602	6.1	12	50,437	13.8
16	60,332	17	57,415	5.1	19	53,584	0.3
23	64,620	24	53,770	20.2	26	49,169	3.3
30	57,295	31	50,791	12.8			

Note: "Weekly Electric Output" is the total of that reported by the individual utilities which consists of the net electric energy generated by each respondent utility plus energy received from others less energy delivered for resale.

These figures are based on the reports of investor-owned utilities, large municipal systems, and state and Federal agencies comprising 85 percent of the total. They are then expanded to an estimated full coverage of the contiguous United States. As these data are for 52 weeks rather than for the calendar year and include net imports and purchases from industrial plants they do not add to totals for the electric utility industry shown in other tables.

SECTION IV
FUEL

CHART IV-A
ELECTRIC POWER GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY
BY SOURCE



Based on Table 21, page 30.
Source: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 21

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY*

BY YEAR AND ENERGY SOURCE
KILOWATTHOURS IN MILLIONS

Year	Total Generation	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other**
1989p	**2,780,775**	**1,551,852**	**158,241**	**264,957**	**529,355**	**265,061**	**11,309**
1988r	2,704,250	1,540,653	148,900	252,801	526,973	222,940	11,984
1987	2,572,127	1,463,781	118,493	272,621	455,270	249,695	12,267
1986	2,487,310	1,385,831	136,585	248,508	414,038	290,844	11,503
1985	2,469,841	1,402,128	100,202	291,946	383,691	281,149	10,724
1984	2,416,304	1,341,681	119,808	297,394	327,634	321,150	8,638
1983	2,310,285	1,259,424	144,499	274,098	293,677	332,130	6,456
1982	2,241,211	1,192,379	146,423	305,260	282,773	309,213	5,164
1981	2,294,812	1,203,554	206,070	345,777	272,674	260,684	6,054
1980	2,286,414	1,161,969	245,547	346,233	251,121	276,039	5,506
1979	2,247,359	1,075,595	302,948	329,486	255,155	279,790	4,387
1978	2,206,313	976,618	364,153	305,392	276,403	280,432	3,315
1977	2,124,166	985,465	357,866	305,444	250,882	220,446	4,063
1976	2,037,674	944,562	319,779	294,610	191,107	283,734	3,883
1975	1,917,619	852,972	288,873	299,766	172,506	300,065	3,437
1974	1,866,436	829,842	299,306	319,931	113,727	300,928	2,703
1973	1,856,216	845,704	312,805	340,449	83,334	271,634	2,290
1972	1,749,637	772,871	272,530	375,735	54,092	272,626	1,783
1971	1,612,589	714,676	218,608	374,026	38,106	266,314	859
1970	1,531,609	706,102	182,488	372,884	21,797	247,456	882
1969	1,442,182	706,001	137,847	333,279	13,928	250,193	934

Note: Total may not equal sum of components due to independent rounding.

**Generation by petroleum coke included in fuel oil from 1969 to 1980, and 1983 to 1989. In 1981 and 1982 petroleum coke included in coal.*

***Includes generation by geothermal, wood, waste, wind and solar.*

p Preliminary. *r Revised.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 22

SOURCES OF ENERGY FOR ELECTRIC GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND ENERGY SOURCE

Year	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other
1989p	**55.8%**	**5.7%**	**9.5%**	**19.0%**	**9.5%**	**0.4%**
1988r	57.0	5.5	9.3	19.5	8.2	0.4
1987	56.9	4.6	10.6	17.7	9.7	0.5
1986	55.7	5.5	10.0	16.6	11.7	0.5
1985	56.8	4.1	11.8	15.5	11.4	0.4
1984	55.5	5.0	12.3	13.6	13.3	0.4
1983	54.5	6.3	11.9	12.7	14.4	0.3
1982	53.2	6.5	13.6	12.6	13.8	0.2
1981	52.4	9.0	15.1	11.9	11.4	0.3
1980	50.8	10.7	15.1	11.0	12.1	0.2
1979	47.9	13.5	14.7	11.4	12.4	0.2
1978	44.3	16.5	13.8	12.5	12.7	0.2
1977	46.4	16.8	14.4	11.8	10.4	0.2
1976	46.4	15.7	14.5	9.4	13.9	0.2
1975	44.5	15.1	15.6	9.0	15.6	0.2
1974	44.5	16.0	17.1	6.1	16.1	0.1
1973	45.6	16.9	18.3	4.5	14.6	0.1
1972	44.2	15.6	21.5	3.1	15.6	0.1
1971	44.3	13.6	23.2	2.4	16.5	0.1
1970	46.1	11.9	24.3	1.4	16.2	0.1
1969	49.0	9.6	23.1	1.0	17.3	0.1

Note: Total may not equal sum of components due to independent rounding.

p Preliminary. *r Revised.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759), as shown in Table 21.*

TABLE 23

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1989p—KILOWATTHOURS IN MILLIONS

State/Division	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**2,780,775**	**1,551,852**	**158,241**	**264,957**	**529,355**	**265,061**	**11,309**
Maine	11,624	—	3,002	—	6,942	1,681	—
New Hampshire	7,125	3,065	2,970	1	—	1,089	—
Vermont	4,761	—	18	4	3,607	948	184
Massachusetts	39,158	12,088	19,139	4,690	3,015	226	—
Rhode Island	496	—	333	163	—	—	—
Connecticut	34,277	2,095	11,575	336	19,563	390	317
New England	**97,441**	**17,248**	**37,038**	**5,193**	**33,126**	**4,334**	**502**
New York	130,454	25,224	41,323	17,141	22,847	23,918	—
New Jersey	41,109	8,376	5,351	4,611	23,032	(261)	—
Pennsylvania	154,790	105,913	8,109	312	39,166	1,290	—
Middle Atlantic	**326,353**	**139,514**	**54,782**	**22,065**	**85,045**	**24,947**	**—**
Ohio	131,432	117,819	442	64	12,661	130	316
Indiana	88,563	87,330	409	374	—	450	—
Illinois	126,841	51,124	339	508	74,820	50	—
Michigan	91,518	67,618	1,407	432	21,312	749	—
Wisconsin	44,361	31,796	70	147	10,848	1,319	181
East North Central	**482,715**	**355,688**	**2,666**	**1,524**	**119,641**	**2,698**	**498**
Minnesota	38,549	26,009	407	306	10,926	654	247
Iowa	28,129	24,089	43	163	3,139	672	24
Missouri	59,382	49,748	114	82	8,344	1,094	—
North Dakota	25,705	23,774	38	(*)	—	1,893	—
South Dakota	6,985	2,387	9	6	—	4,583	—
Nebraska	21,089	11,582	57	215	8,077	1,158	—
Kansas	34,222	22,907	109	1,486	9,709	10	*
West North Central	**214,061**	**160,495**	**776**	**2,258**	**40,196**	**10,064**	**271**
Delaware	8,458	5,066	2,566	826	—	—	—
Maryland	35,759	23,627	6,044	1,577	2,719	1,778	14
District of Columbia	650	—	650	—	—	—	—
Virginia	43,360	24,059	4,237	399	14,264	401	*
West Virginia	82,860	82,105	264	16	—	476	—
North Carolina	87,103	50,524	256	115	29,212	6,996	—
South Carolina	66,984	23,800	134	255	40,780	2,016	—
Georgia	92,448	63,405	157	50	24,961	3,874	—
Florida	124,273	59,418	26,287	17,418	20,916	234	—
South Atlantic	**541,895**	**332,004**	**40,595**	**20,656**	**132,852**	**15,775**	**14**
Kentucky	70,760	66,214	112	29	—	4,404	—
Tennessee	73,959	46,324	178	1	15,603	11,853	—
Alabama	77,590	52,601	128	185	11,524	13,153	—
Mississippi	21,055	8,724	738	3,767	7,826	—	—
East South Central	**243,364**	**173,863**	**1,156**	**3,982**	**34,954**	**29,410**	**—**
Arkansas	33,400	18,604	144	2,723	8,844	3,084	—
Louisiana	52,670	18,081	298	21,900	12,391	—	—
Oklahoma	44,448	24,122	29	17,905	—	2,392	—
Texas	232,293	118,566	2,245	99,861	9,990	1,441	190
West South Central	**362,811**	**179,374**	**2,717**	**142,389**	**31,225**	**6,917**	**190**
Montana	25,823	16,129	30	43	—	9,550	72
Idaho	8,929	—	2	—	—	8,927	—
Wyoming	36,751	36,003	59	9	—	680	(*)
Colorado	32,296	29,406	30	627	529	1,703	1
New Mexico	28,349	25,446	41	2,630	—	232	—
Arizona	53,125	32,364	194	4,840	7,850	7,877	—
Utah	30,496	29,676	48	37	—	562	173
Nevada	19,681	15,382	377	2,063	—	1,859	—
Mountain	**235,449**	**184,405**	**781**	**10,248**	**8,380**	**31,390**	**246**
Washington	87,121	8,519	85	729	6,118	71,293	376
Oregon	44,964	440	35	1,347	5,299	37,815	28
California	132,264	—	9,327	51,734	32,519	29,524	9,161
Pacific	**264,349**	**8,959**	**9,447**	**53,810**	**43,936**	**138,633**	**9,565**
Alaska	4,388	302	381	2,832	—	873	—
Hawaii	7,949	—	7,902	—	—	22	25
Alaska & Hawaii	**12,336**	**302**	**8,283**	**2,832**	**—**	**895**	**25**

Note: Total may not equal sum of components due to independent rounding.

†Excludes petroleum coke.

††Includes petroleum coke.

**Less than five hundred thousand killowatthours.*

***Includes generation by geothermal, wood, waste, wind and solar.*

p Preliminary. ( ) Denotes negative figure.

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 24

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1989p—PERCENT

State/Division	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**100.0%**	**55.8%**	**5.7%**	**9.5%**	**19.0%**	**9.5%**	**0.4%**
Maine	100.0	—	25.8	—	59.7	14.5	—
New Hampshire	100.0	43.0	41.7	*	—	15.3	—
Vermont	100.0	—	0.4	0.1	75.8	19.9	3.9
Massachusetts	100.0	30.9	48.9	12.0	7.7	0.6	—
Rhode Island	100.0	—	67.2	32.8	—	—	—
Connecticut	100.0	6.1	33.8	1.0	57.1	1.1	0.9
New England	**100.0**	**17.7**	**38.0**	**5.3**	**34.0**	**4.4**	**0.5**
New York	100.0	19.3	31.7	13.1	17.5	18.3	—
New Jersey	100.0	20.4	13.0	11.2	56.0	(0.6)	—
Pennsylvania	100.0	68.4	5.2	0.2	25.3	0.8	—
Middle Atlantic	**100.0**	**42.7**	**16.8**	**6.8**	**26.1**	**7.6**	**—**
Ohio	100.0	89.6	0.3	*	9.6	0.1	0.2
Indiana	100.0	98.6	0.5	0.4	—	0.5	—
Illinois	100.0	40.3	0.3	0.4	59.0	*	—
Michigan	100.0	73.9	1.5	0.5	23.3	0.8	—
Wisconsin	100.0	71.7	0.2	0.3	24.5	3.0	0.4
East North Central	**100.0**	**73.7**	**0.6**	**0.3**	**24.8**	**0.6**	**0.1**
Minnesota	100.0	67.5	1.1	0.8	28.3	1.7	0.6
Iowa	100.0	85.6	0.2	0.6	11.2	2.4	0.1
Missouri	100.0	83.8	0.2	0.1	14.1	1.8	—
North Dakota	100.0	92.5	0.1	(*)	—	7.4	—
South Dakota	100.0	34.2	0.1	0.1	—	65.6	—
Nebraska	100.0	54.9	0.3	1.0	38.3	5.5	—
Kansas	100.0	66.9	0.3	4.3	28.4	*	*
West North Central	**100.0**	**75.0**	**0.4**	**1.1**	**18.8**	**4.7**	**0.1**
Delaware	100.0	59.9	30.3	9.8	—	—	—
Maryland	100.0	66.1	16.9	4.4	7.6	5.0	*
District of Columbia	100.0	—	100.0	—	—	—	—
Virginia	100.0	55.5	9.8	0.9	32.9	0.9	*
West Virginia	100.0	99.1	0.3	*	—	0.6	—
North Carolina	100.0	58.0	0.3	0.1	33.5	8.0	—
South Carolina	100.0	35.5	0.2	0.4	60.9	3.0	—
Georgia	100.0	68.6	0.2	0.1	27.0	4.2	—
Florida	100.0	47.8	21.2	14.0	16.8	0.2	—
South Atlantic	**100.0**	**61.3**	**7.5**	**3.8**	**24.5**	**2.9**	*****
Kentucky	100.0	93.6	0.2	*	—	6.2	—
Tennessee	100.0	62.6	0.2	*	21.1	16.0	—
Alabama	100.0	67.8	0.2	0.2	14.9	17.0	—
Mississippi	100.0	41.4	3.5	17.9	37.2	—	—
East South Central	**100.0**	**71.4**	**0.5**	**1.6**	**14.4**	**12.1**	**—**
Arkansas	100.0	55.7	0.4	8.2	26.5	9.2	—
Louisiana	100.0	34.3	0.6	41.6	23.5	—	—
Oklahoma	100.0	54.3	0.1	40.3	—	5.4	—
Texas	100.0	51.0	1.0	43.0	4.3	0.6	0.1
West South Central	**100.0**	**49.4**	**0.7**	**39.2**	**8.6**	**1.9**	**0.1**
Montana	100.0	62.5	0.1	0.2	—	37.0	0.3
Idaho	100.0	—	*	—	—	100.0	—
Wyoming	100.0	98.0	0.2	*	—	1.9	(*)
Colorado	100.0	91.1	0.1	1.9	1.6	5.3	*
New Mexico	100.0	89.8	0.1	9.3	—	0.8	—
Arizona	100.0	60.9	0.4	9.1	14.8	14.8	—
Utah	100.0	97.3	0.2	0.1	—	1.8	0.6
Nevada	100.0	78.2	1.9	10.5	—	9.4	—
Mountain	**100.0**	**78.3**	**0.3**	**4.4**	**3.6**	**13.3**	**0.1**
Washington	100.0	9.8	0.1	0.8	7.0	81.9	0.4
Oregon	100.0	1.0	0.1	3.0	11.8	84.1	0.1
California	100.0	—	7.1	39.1	24.6	22.3	6.9
Pacific	**100.0**	**3.4**	**3.6**	**20.4**	**16.6**	**52.4**	**3.6**
Alaska	100.0	6.9	8.7	64.5	—	19.9	—
Hawaii	100.0	—	99.4	—	—	0.3	0.3
Alaska & Hawaii	**100.0**	**2.4**	**67.1**	**23.0**	**—**	**7.3**	**0.2**

Note: Total may not equal sum of components due to independent rounding.

† Excludes petroleum coke.

†† Includes petroleum coke.

** Less than one tenth of one percent.*

*** Includes generation by geothermal, wood, waste, wind and solar.*

p Preliminary. ( ) Denotes negative value.

Source: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report. *(EIA-759), as shown in Table 23.*

TABLE 25

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND KIND OF FUEL

Year	Coal* (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents**† (Thousand Short Tons)	Net Generation by Fuels** (kWh in Millions)	Heat Rate† (Btu per kWh)	Lbs. of Coal per kWh†
1989p	**765,820**	**266,836**	**2,767,903**	**1,002,474‡**	**1,975,050**	**10,312**	**0.987**
1988r	758,372	248,096	2,635,613	984,969‡	1,942,353	10,328	0.984
1987	717,894	199,378	2,844,051	944,420‡	1,854,695	10,354	0.981
1986	685,056	230,482	2,602,370	907,720‡	1,770,925	10,423	0.989
1985	693,841	173,414	3,044,083	926,793‡	1,794,276	10,429	0.990
1984	664,399	204,479	3,111,342	909,156‡	1,758,882	10,385	0.990
1983	625,211	245,497	2,910,767	867,621‡	1,678,021	10,547	0.993
1982	593,666	249,771	3,225,518	858,869‡	1,644,062	10,517	0.996
1981	596,936	351,111	3,640,154	922,133‡	1,755,401	10,506	0.992
1980	569,453	420,214	3,681,595	916,952‡	1,753,749	10,489	0.980
1979	527,317	523,256	3,490,517	837,371	1,708,029	10,470	0.981
1978	481,624	635,829	3,188,370	811,814	1,646,163	10,495	0.986
1977	477,215	623,656	3,190,571	798,425	1,648,775	10,449	0.969
1976	448,431	555,583	3,080,627	740,112	1,558,951	10,369	0.950
1975	406,032	506,081	3,157,591	686,236	1,441,611	10,383	0.952
1974	392,344	536,140	3,429,072	685,115	1,449,079	10,481	0.946
1973	388,190	559,842	3,640,756	688,043	1,498,958	10,429	0.918
1972	352,391	493,663	3,976,762	647,968	1,421,136	10,479	0.912
1971	327,878	396,438	3,975,972	599,766	1,307,310	10,536	0.918
1970	320,818	335,504	3,931,996	573,152	1,261,474	10,508	0.909
1969	310,641	251,027	3,487,642	517,937	1,177,127	10,457	0.880

**Beginning in 1982, petroleum coke excluded from Coal.*

***Excludes geothermal, wood, waste, and nuclear fuels, and includes petroleum coke.*

† *EEI estimate.*

‡ *Beginning in 1980, Coal Equivalents are calculated on the basis of Btu instead of generation data.*

p Preliminary. *r Revised.*

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 26

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND KIND OF FUEL—YEAR 1989p

State/Division	Coal (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents†‡ (Thousand Short Tons)	Net Generation by Fuels† (kWh in Millions)	Heat Rate‡ (Btu per kWh)	Lbs. of Coal per kWh‡
Total United States	**765,820**	**266,836**	**2,767,903**	**1,002,474**	**1,975,050**	**10,312**	**0.987**
Maine	—	5,069	—	1,222	3,002	10,650	—
New Hampshire	1,160	5,135	23	2,410	6,037	10,629	0.757
Vermont	—	50	37	11	22	15,207	—
Massachusetts	4,474	31,279	48,448	13,986	35,916	9,983	0.740
Rhode Island	—	713	2,147	256	496	13,484	—
Connecticut	853	19,074	3,291	5,517	14,006	10,410	0.814
New England	**6,486**	**61,320**	**53,946**	**23,402**	**59,479**	**10,213**	**0.752**
New York	10,158	68,272	182,000	34,052	83,689	10,422	0.805
New Jersey	3,244	9,982	54,778	7,726	18,338	11,030	0.775
Pennsylvania	43,241	13,207	4,022	46,754	114,335	10,079	0.817
Middle Atlantic	**56,642**	**91,461**	**240,800**	**88,532**	**216,362**	**10,292**	**0.812**
Ohio	50,479	1,018	983	50,787	118,325	10,075	0.857
Indiana	42,378	370	4,075	42,674	88,113	10,271	0.971
Illinois	25,758	1,516	6,967	26,537	51,972	10,945	1.008
Michigan	29,972	2,991	18,782	30,883	69,456	10,065	0.887
Wisconsin	17,851	168	2,076	18,010	32,013	10,831	1.123
East North Central	**166,437**	**6,063**	**32,883**	**168,890**	**359,878**	**10,317**	**0.936**
Minnesota	16,361	89	4,321	16,641	26,722	10,562	1.258
Iowa	14,575	112	2,402	14,740	24,294	11,437	1.210
Missouri	24,612	257	1,242	24,745	49,944	10,426	0.989
North Dakota	20,538	72	1	20,570	23,812	11,551	1.728
South Dakota	2,281	33	132	2,306	2,402	12,417	1.911
Nebraska	7,303	110	2,593	7,484	11,853	10,948	1.261
Kansas	14,774	246	18,741	15,861	24,503	11,682	1.290
West North Central	**100,444**	**919**	**29,432**	**102,348**	**163,530**	**11,006**	**1.252**
Delaware	2,128	3,957	7,999	3,438	8,458	10,767	0.840
Maryland	9,074	11,662	19,184	12,752	31,248	10,249	0.768
District of Columbia	—	1,490	—	361	650	13,727	—
Virginia	9,573	6,786	3,796	11,391	28,695	10,081	0.796
West Virginia	32,391	402	124	32,486	82,384	9,840	0.789
North Carolina	19,516	557	1,673	19,713	50,895	9,716	0.773
South Carolina	9,472	285	2,705	9,648	24,189	10,018	0.796
Georgia	25,839	345	684	25,951	63,612	9,849	0.815
Florida	24,292	42,966	186,814	43,189	103,123	10,239	0.818
South Atlantic	**132,285**	**68,451**	**222,979**	**158,929**	**393,254**	**10,016**	**0.797**
Kentucky	29,109	230	328	29,181	66,356	10,282	0.879
Tennessee	19,283	356	18	19,372	46,503	9,825	0.833
Alabama	21,609	216	1,707	21,729	52,913	9,924	0.822
Mississippi	3,566	1,363	44,927	5,618	13,229	10,428	0.818
East South Central	**73,567**	**2,164**	**46,980**	**75,900**	**179,001**	**10,066**	**0.846**
Arkansas	11,278	278	29,462	13,117	21,471	10,561	1.212
Louisiana	11,770	521	227,082	26,814	40,279	10,687	1.302
Oklahoma	14,423	62	178,021	25,087	42,056	10,436	1.196
Texas	86,701	4,116	1,023,793	159,721	220,673	10,401	1.462
West South Central	**124,171**	**4,977**	**1,458,358**	**224,738**	**324,479**	**10,449**	**1.384**
Montana	10,208	60	336	10,253	16,201	10,827	1.266
Idaho	—	4	—	1	2	12,491	—
Wyoming	21,908	118	85	21,953	36,071	10,614	1.217
Colorado	15,686	71	8,375	16,106	30,063	10,564	1.067
New Mexico	15,250	84	27,365	16,833	28,116	10,607	1.199
Arizona	16,182	361	50,807	18,794	37,398	10,533	1.000
Utah	12,949	86	636	13,002	29,761	8,671	0.873
Nevada	7,487	669	23,210	8,745	17,822	10,943	0.973
Mountain	**99,670**	**1,454**	**110,815**	**105,687**	**195,434**	**10,351**	**1.081**
Washington	5,514	192	8,320	6,127	9,334	10,603	1.295
Oregon	306	76	12,942	1,146	1,822	10,188	1.391
California	—	15,370	517,700	38,959	61,061	10,281	—
Pacific	**5,820**	**15,639**	**538,963**	**46,231**	**72,216**	**10,321**	**1.299**
Alaska	299	736	32,746	2,652	3,515	12,260	1.980
Hawaii	—	13,651	—	5,167	7,902	10,388	—
Alaska & Hawaii	**299**	**14,387**	**32,746**	**7,819**	**11,417**	**10,998**	**1.980**

Note: Total may not equal sum of components due to independent rounding.

† Excludes geothermal, wood, waste, and nuclear fuels, and includes petroleum coke.

‡ EEI estimate.

p Preliminary.

Source: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 27

FOSSIL FUELS USED FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES 1986-1989 BY GEOGRAPHIC DIVISION

		Composite Averages			Coal (a)			Oil (b)			Gas (c)		
Division	Year	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
United States	1989	174.0¢	1.79¢	10,312	150.3¢	$31.49	10,478	293.7¢	$18.33	148,572	238.4¢	244.64¢	1,026
	1988	170.7	1.76	10,328	152.2	31.99	10,511	260.5	16.32	149,097	227.7	234.06	1,028
	1987	177.7	1.84	10,354	157.8	33.32	10,556	304.2	19.04	149,015	226.6	233.52	1,030
	1986	184.5	1.92	10,423	165.5	34.85	10,531	283.4	17.74	149,050	232.3	239.90	1,033
New England	1989	239.3	2.44	10,213	168.3	43.98	13,066	270.4	17.02	149,924	243.1	253.57	1,043
	1988	224.4	2.29	10,213	194.3	51.07	13,141	237.2	14.93	149,833	225.4	231.22	1,026
	1987	252.9	2.58	10,212	195.4	51.38	13,147	282.0	17.80	150,288	244.8	251.27	1,027
	1986	238.9	2.45	10,270	204.8	54.25	13,243	251.4	15.83	149,923	235.9	242.28	1,027
Middle Atlantic	1989	206.2	2.12	10,292	155.9	38.87	12,465	305.7	19.08	148,575	263.4	270.66	1,028
	1988	192.4	1.98	10,317	154.3	38.78	12,569	268.3	16.74	148,549	245.6	252.64	1,028
	1987	205.6	2.12	10,332	156.6	38.98	12,450	311.5	19.37	148,050	272.7	280.49	1,028
	1986	201.6	2.10	10,415	161.5	40.07	12,402	285.8	17.80	148,266	249.5	259.23	1,039
East North Central	1989	161.7	1.67	10,317	159.6	35.23	11,039	350.9	21.51	145,916	266.5	120.49	452
	1988	166.2	1.72	10,379	164.1	36.44	11,102	325.5	20.06	146,747	278.3	147.35	530
	1987	174.5	1.81	10,350	172.2	38.34	11,133	385.1	24.00	148,393	298.1	163.17	547
	1986	186.0	1.93	10,393	180.4	39.87	11,051	589.3	36.60	147,883	409.7	246.11	601
West North Central	1989	118.4	1.30	11,006	116.5	20.39	8,750	377.8	22.09	139,207	221.1	217.52	984
	1988	122.2	1.33	10,852	120.2	20.89	8,687	350.5	20.96	142,364	213.1	210.89	990
	1987	129.0	1.41	10,969	127.2	22.40	8,807	396.5	23.27	139,729	225.3	223.98	994
	1986	136.5	1.50	10,978	134.3	23.45	8,729	350.8	21.35	144,908	268.2	262.69	979
South Atlantic	1989	188.8	1.89	10,016	173.6	42.94	12,365	277.5	17.45	149,766	247.0	250.71	1,015
	1988	181.8	1.81	9,939	172.8	42.92	12,416	246.4	15.54	150,189	215.6	217.77	1,010
	1987	190.5	1.90	9,947	175.6	43.55	12,402	292.9	18.44	149,903	271.4	273.80	1,009
	1986	193.7	1.93	9,970	185.2	45.81	12,367	254.2	16.03	150,120	208.8	210.53	1,008
East South Central	1989	155.8	1.57	10,066	154.3	36.62	11,869	288.2	18.00	148,668	190.5	184.11	967
	1988	157.3	1.57	10,003	155.5	37.12	11,933	356.0	21.76	145,501	190.0	194.26	1,022
	1987	162.1	1.64	10,137	161.0	38.57	11,979	405.6	24.07	141,326	188.2	193.54	1,028
	1986	171.4	1.74	10,156	169.4	40.25	11,881	232.4	14.54	148,945	227.4	236.10	1,038
West South Central	1989	182.2	1.90	10,449	148.8	23.04	7,742	414.4	24.95	143,385	218.1	225.92	1,036
	1988	180.2	1.89	10,475	153.7	23.82	7,749	418.9	25.63	145,643	208.9	216.40	1,036
	1987	183.1	1.92	10,470	161.0	24.71	7,672	467.9	28.23	143,673	205.1	212.70	1,037
	1986	192.6	2.04	10,570	164.0	25.24	7,698	450.9	27.73	146,451	218.6	227.18	1,039
Mountain	1989	119.5	1.24	10,351	112.4	21.78	9,685	352.3	21.04	142,227	218.7	224.99	1,029
	1988	116.6	1.24	10,647	111.7	21.73	9,729	296.5	18.21	146,267	222.9	227.82	1,022
	1987	116.6	1.25	10,720	111.6	21.74	9,737	324.4	19.83	145,515	235.2	241.25	1,026
	1986	121.8	1.33	10,940	114.3	21.98	9,615	369.1	22.40	144,539	270.4	279.85	1,035
Pacific	1989	275.0	2.84	10,321	148.9	24.18	8,121	297.0	18.26	146,358	292.8	304.21	1,039
	1988	266.2	2.76	10,377	144.4	23.40	8,103	272.6	16.95	148,075	285.5	295.92	1,037
	1987	244.2	2.56	10,478	161.4	26.07	8,075	298.4	18.30	146,027	253.3	263.38	1,040
	1986	285.1	3.14	11,002	160.0	25.81	8,065	458.9	28.16	146,103	284.4	296.59	1,043
Alaska	1989	135.3	1.66	12,260	194.8	30.68	7,874	432.8	25.14	138,292	104.2	104.31	1,001
	1988	124.8	1.48	11,841	263.5	41.13	7,806	618.0	35.97	138,581	99.7	99.85	1,001
	1987	118.0	1.50	12,670	199.8	31.26	7,823	376.2	22.13	140,038	87.2	87.84	1,007
	1986	147.1	2.17	14,721	181.7	28.85	7,938	332.6	19.44	139,178	94.5	94.54	1,001
Hawaii	1989	328.8	3.42	10,388	—	—	—	328.8	19.60	141,928	—	—	—
	1988	293.6	3.12	10,640	—	—	—	293.6	18.29	148,286	—	—	—
	1987	345.2	3.66	10,598	—	—	—	345.2	21.53	148,458	—	—	—
	1986	312.2	3.29	10,551	—	—	—	312.2	19.45	148,315	—	—	—

(a) Coal includes bituminous and anthracite coal and relatively small amounts of lignite.
(b) Oil includes fuel oil, crude oil, small amounts of tar and gasoline, and petroleum coke.
(c) Gas includes natural and manufactured gas and waste gas.

TABLE 28

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

1986-1989 BY GEOGRAPHIC DIVISION

Division	Year	Average Cost per Million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
United States	1989	68.53¢	7.63	11,133
	1988	72.64	7.88	10,854
	1987	71.11	7.68	10,803
	1986	70.45	7.61	10,802
New England	1989	76.64	8.16	10,654
	1988	79.13	8.54	10,792
	1987	84.90	9.05	10,663
	1986	83.93	9.02	10,750
Middle Atlantic	1989	65.41	7.35	11,239
	1988	65.29	7.12	10,912
	1987	68.67	7.51	10,931
	1986	67.09	7.30	10,873
East North Central	1989	69.60	7.49	10,767
	1988	76.48	8.30	10,848
	1987	70.15	7.66	10,922
	1986	70.37	7.68	10,907
West North Central	1989	52.77	5.60	10,614
	1988	58.25	6.21	10,664
	1987	58.38	6.23	10,664
	1986	63.62	6.77	10,646
South Atlantic	1989	63.82	6.84	10,723
	1988	68.05	7.29	10,709
	1987	64.22	6.89	10,725
	1986	62.69	6.70	10,689
East South Central	1989	85.20	9.19	10,790
	1988	91.48	10.09	11,034
	1987	74.13	8.30	11,193
	1986	78.74	8.78	11,149
West South Central	1989	73.88	7.98	10,805
	1988	81.96	8.78	10,715
	1987	85.96	9.24	10,754
	1986	87.65	9.56	10,887
Mountain	1989	80.64	8.57	10,626
	1988	81.77	8.49	10,383
	1987	85.05	8.85	10,408
	1986	89.12	9.42	10,573
Pacific	1989	75.27	7.97	10,591
	1988	78.47	8.36	10,659
	1987	86.66	9.30	10,735
	1986	79.64	8.66	10,878
Alaska & Hawaii	1989	–	–	–
	1988	–	–	–
	1987	–	–	–
	1986	–	–	–

TABLE 29

FOSSIL FUELS USED FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES

BY STATE—YEAR 1989

	Composite Averages			Coal (a)			Oil (b)			Gas (c)		
State/Division	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
Total United States	**174.0¢**	**1.79¢**	**10,312**	**150.3¢**	**$31.49**	**10,478**	**293.7¢**	**$18.33**	**148,572**	**238.4¢**	**244.64¢**	**1,026**
Maine	274.1	2.92	10,650	—	—	—	274.1	17.26	149,979	—	—	—
New Hampshire	202.7	2.15	10,629	178.2	47.42	13,308	225.5	14.60	154,205	—	—	—
Vermont	472.0	7.18	15,207	—	—	—	472.0	27.41	138,246	—	—	—
Massachusetts	229.3	2.29	9,983	155.4	40.33	12,974	270.4	16.97	149,373	242.6	253.32	1,044
Rhode Island	260.8	3.52	13,484	—	—	—	270.7	16.97	149,290	241.4	248.86	1,031
Connecticut	271.4	2.83	10,410	221.1	58.45	13,217	281.4	17.69	149,682	253.1	260.66	1,030
New England	**239.3**	**2.44**	**10,213**	**168.3**	**43.98**	**13,066**	**270.4**	**17.02**	**149,924**	**243.1**	**253.57**	**1,043**
New York	252.4	2.63	10,422	162.2	41.63	12,830	306.2	19.12	148,698	254.6	261.29	1,026
New Jersey	250.4	2.76	11,030	180.5	47.69	13,210	311.4	19.31	147,626	290.6	300.03	1,032
Pennsylvania	163.7	1.65	10,079	152.4	37.57	12,325	299.2	18.68	148,637	299.7	308.42	1,029
Middle Atlantic	**206.2**	**2.12**	**10,292**	**155.9**	**38.87**	**12,465**	**305.7**	**19.08**	**148,575**	**263.4**	**270.66**	**1,028**
Ohio	154.2	1.55	10,075	153.2	36.14	11,793	330.0	20.26	146,220	299.3	305.78	1,022
Indiana	143.9	1.48	10,271	143.2	30.49	10,647	411.8	23.55	136,163	255.7	262.19	1,025
Illinois	192.3	2.10	10,945	189.3	40.39	10,669	327.6	20.66	150,100	328.2	332.59	1,013
Michigan	176.4	1.78	10,065	171.4	39.45	11,506	368.0	22.29	144,183	198.0	30.03	152
Wisconsin	154.9	1.68	10,831	153.5	29.58	9,638	391.2	22.65	137,844	286.1	287.96	1,007
East North Central	**161.7**	**1.67**	**10,317**	**159.6**	**35.23**	**11,039**	**350.9**	**21.51**	**145,916**	**266.5**	**120.49**	**452**
Minnesota	126.7	1.34	10,562	124.4	21.63	8,695	360.0	21.31	140,942	272.4	273.25	1,003
Iowa	118.2	1.35	11,437	116.3	21.69	9,325	419.2	23.86	135,530	251.3	254.77	1,014
Missouri	137.0	1.43	10,426	136.5	28.34	10,385	361.2	21.27	140,256	241.7	244.78	1,013
North Dakota	73.5	0.85	11,551	73.1	9.50	6,496	465.3	27.21	139,207	385.4	396.88	1,030
South Dakota	126.2	1.57	12,417	123.8	15.76	6,363	410.0	23.91	138,857	258.5	257.25	995
Nebraska	90.3	0.99	10,948	87.2	15.10	8,656	300.2	17.15	136,043	246.6	239.02	969
Kansas	130.4	1.52	11,682	126.0	22.86	9,072	386.0	23.02	142,023	197.4	192.30	974
West North Central	**118.4**	**1.30**	**11,006**	**116.5**	**20.39**	**8,750**	**377.8**	**22.09**	**139,207**	**221.1**	**217.52**	**984**
Delaware	218.4	2.35	10,767	190.2	47.84	12,575	272.9	17.15	149,656	250.8	252.98	1,009
Maryland	200.5	2.05	10,249	168.8	42.65	12,633	281.7	17.61	148,778	267.5	279.70	1,045
District of Columbia	344.3	4.73	13,727	—	—	—	344.3	20.63	142,652	—	—	—
Virginia	176.1	1.77	10,081	156.3	39.71	12,706	286.2	17.81	148,217	231.8	241.55	1,042
West Virginia	149.9	1.47	9,840	149.3	36.86	12,346	478.5	27.83	138,472	—	—	—
North Carolina	182.0	1.77	9,716	180.7	45.41	12,565	430.7	25.06	138,573	283.2	291.98	1,031
South Carolina	177.9	1.78	10,018	175.3	44.11	12,585	539.4	31.60	139,474	268.6	274.88	1,024
Georgia	184.3	1.82	9,849	183.5	44.34	12,081	499.6	29.15	138,919	316.4	324.58	1,026
Florida	223.9	2.29	10,239	197.5	48.18	12,196	269.2	17.05	150,764	243.6	246.21	1,011
South Atlantic	**188.8**	**1.89**	**10,016**	**173.6**	**42.94**	**12,365**	**277.5**	**17.45**	**149,766**	**247.0**	**250.71**	**1,015**
Kentucky	123.3	1.27	10,282	123.1	28.70	11,655	278.8	16.24	138,696	230.2	235.92	1,025
Tennessee	144.7	1.42	9,825	144.5	34.31	11,868	331.9	19.58	140,452	493.4	509.68	1,033
Alabama	200.3	1.99	9,924	200.2	48.16	12,028	401.0	23.03	136,720	214.3	205.40	958
Mississippi	187.7	1.96	10,428	177.8	45.09	12,678	284.2	17.90	149,983	189.6	183.30	967
East South Central	**155.8**	**1.57**	**10,066**	**154.3**	**36.62**	**11,869**	**288.2**	**18.00**	**148,668**	**190.5**	**184.11**	**967**
Arkansas	167.2	1.77	10,561	165.5	28.52	8,618	441.6	26.96	145,321	165.7	168.64	1,018
Louisiana	170.6	1.82	10,687	162.2	25.71	7,925	394.5	24.16	145,803	173.7	179.92	1,036
Oklahoma	201.5	2.10	10,436	139.8	24.45	8,748	296.5	17.32	139,051	285.1	298.28	1,046
Texas	182.0	1.89	10,401	146.3	21.71	7,418	417.0	25.05	143,033	217.3	224.78	1,034
West South Central	**182.2**	**1.90**	**10,449**	**148.8**	**23.04**	**7,742**	**414.4**	**24.95**	**143,385**	**218.1**	**225.92**	**1,036**
Montana	60.3	0.65	10,827	59.9	10.16	8,478	376.6	22.30	140,990	132.4	157.84	1,192
Idaho	440.9	5.51	12,491	—	—	—	440.9	25.94	140,045	—	—	—
Wyoming	88.6	0.94	10,614	88.0	15.44	8,778	461.3	27.10	139,881	348.6	361.18	1,039
Colorado	113.0	1.19	10,564	109.9	21.67	9,855	451.8	26.07	137,368	233.7	219.51	939
New Mexico	129.5	1.37	10,607	119.7	21.79	9,099	695.1	40.67	139,307	212.7	220.12	1,035
Arizona	163.0	1.72	10,533	149.8	31.40	10,479	472.9	28.27	142,359	219.0	226.64	1,035
Utah	118.4	1.03	8,671	117.9	26.65	11,305	414.8	24.28	139,342	212.6	231.40	1,088
Nevada	163.1	1.79	10,943	152.7	33.99	11,129	267.3	16.09	143,325	222.3	229.55	1,033
Mountain	**119.5**	**1.24**	**10,351**	**112.4**	**21.78**	**9,685**	**352.3**	**21.04**	**142,227**	**218.7**	**224.99**	**1,029**
Washington	155.3	1.65	10,603	147.5	23.91	8,107	338.4	21.08	148,338	217.3	228.21	1,050
Oregon	179.9	1.83	10,188	181.8	30.72	8,446	451.5	34.25	180,600	168.3	170.12	1,011
California	296.8	3.05	10,281	—	—	—	295.6	18.15	146,170	297.0	308.70	1,040
Pacific	**275.0**	**2.84**	**10,321**	**148.9**	**24.18**	**8,121**	**297.0**	**18.26**	**146,358**	**292.8**	**304.21**	**1,039**
Alaska	135.3	1.66	12,260	194.8	30.68	7,874	432.8	25.14	138,292	104.2	104.31	1,001
Hawaii	328.8	3.42	10,388	—	—	—	328.8	19.60	141,928	—	—	—
Alaska & Hawaii	**258.5**	**2.84**	**10,998**	**194.8**	**30.68**	**7,874**	**332.5**	**19.80**	**141,799**	**104.2**	**104.31**	**1,001**

See page 35 for footnotes.

TABLE 30

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

BY STATE—YEAR 1989

State/Division	Average Cost per Million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
Total United States	**68.53¢**	**7.63**	**11,133**
Maine	55.42	5.76	10,398
New Hampshire	—	—	—
Vermont	50.77	5.44	10,705
Massachusetts	65.76	7.54	11,471
Rhode Island	—	—	—
Connecticut	90.64	9.62	10,608
New England	**76.64**	**8.16**	**10,654**
New York	67.57	7.30	10,806
New Jersey	62.81	6.78	10,799
Pennsylvania	65.64	7.71	11,750
Middle Atlantic	**65.41**	**7.35**	**11,239**
Ohio	108.81	11.47	10,542
Indiana	—	—	—
Illinois	64.47	6.93	10,754
Michigan	75.74	8.36	11,042
Wisconsin	47.10	4.99	10,585
East North Central	**69.60**	**7.49**	**10,767**
Minnesota	48.09	5.25	10,921
Iowa	69.32	7.46	10,764
Missouri	62.80	6.56	10,449
North Dakota	—	—	—
South Dakota	—	—	—
Nebraska	64.21	6.97	10,858
Kansas	33.76	3.43	10,161
West North Central	**52.77**	**5.60**	**10,614**
Delaware	—	—	—
Maryland	49.35	5.42	10,989
District of Columbia	—	—	—
Virginia	39.08	4.24	10,855
West Virginia	—	—	—
North Carolina	54.95	5.81	10,582
South Carolina	57.48	6.07	10,561
Georgia	99.03	10.75	10,859
Florida	64.82	7.10	10,952
South Atlantic	**63.82**	**6.84**	**10,723**
Kentucky	—	—	—
Tennessee	90.76	9.57	10,541
Alabama	58.50	6.46	11,038
Mississippi	114.55	12.51	10,919
East South Central	**85.20**	**9.19**	**10,790**
Arkansas	73.02	7.98	10,926
Louisiana	93.44	10.02	10,723
Oklahoma	—	—	—
Texas	48.99	5.29	10,801
West South Central	**73.88**	**7.98**	**10,805**
Montana	—	—	—
Idaho	—	—	—
Wyoming	—	—	—
Colorado	N/A	N/A	N/A
New Mexico	—	—	—
Arizona	80.64	8.57	10,626
Utah	—	—	—
Nevada	—	—	—
Mountain	**80.64**	**8.57**	**10,626**
Washington	50.15	5.18	10,337
Oregon	46.02	4.92	10,691
California	85.03	9.03	10,622
Pacific	**75.27**	**7.97**	**10,591**
Alaska	—	—	—
Hawaii	—	—	—
Alaska & Hawaii	—	—	—

N/A Not Available.

TABLE 31

AVERAGE COST OF FOSSIL FUELS DELIVERED TO STEAM-ELECTRIC UTILITY PLANTS

BY YEAR

(CENTS PER MILLION BTU)

Year	Coal	Residual Oil*	Natural Gas**	All Fossil Fuels**
1989	144.5	284.6	235.5	167.5
1988	146.6r	240.5r	226.3r	164.3r
1987	150.6	297.6	224.0r	170.6r
1986	157.9	240.1	235.1r	175.0
1985	164.8	424.4	344.4r	209.4r
1984	166.4	481.2	360.3r	219.1r

*Residual fuel oil prices include Fuel Oil No. 4, No. 5, No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (Fuel Oil No. 2, kerosene, and jet fuel) prices.

**Includes small quantities of coke oven gas, refinery gas and blast furnace gas.

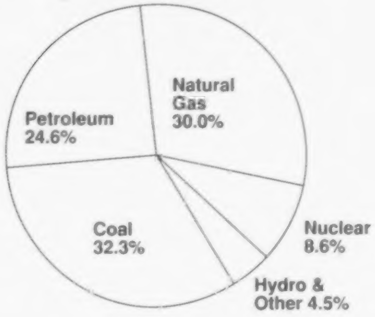
r Revised.

Source: U.S. Department of Energy. Energy Information Administration. Monthly Energy Review

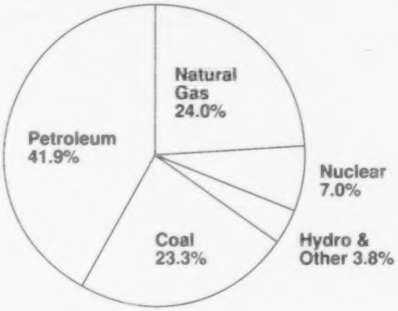
SECTION V
ENERGY

CHART V-A
ENERGY PRODUCTION AND CONSUMPTION
BY PRIMARY ENERGY SOURCE

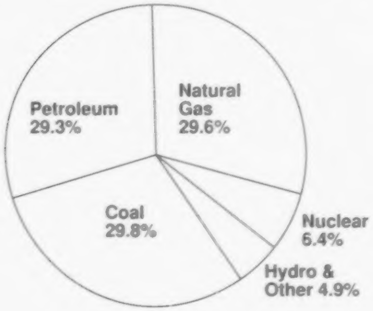
1989 Production
Total BTU's = 65.788 Quads



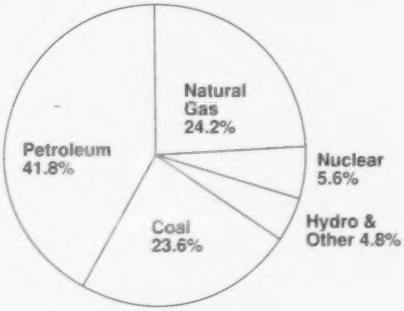
1989 Consumption
Total BTU's = 81.240 Quads



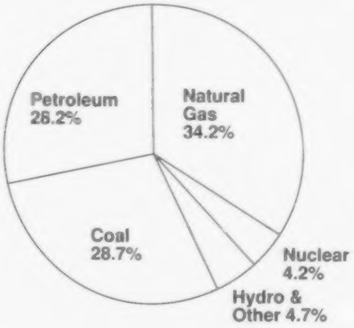
1985 Production
Total BTU's = 64.765 Quads



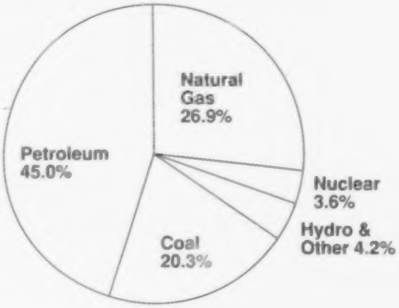
1985 Consumption
Total BTU's = 73.945 Quads



1980 Production
Total BTU's = 64.761 Quads



1980 Consumption
Total BTU's = 75.995 Quads



Source: U.S. Department of Energy. Energy Information Administration. 'Monthly Energy Review' February, 1990.

TABLE 32

ENERGY SUPPLY AND DISPOSITION BALANCE

BY YEAR
(QUADRILLION BTU)

	1989p	1988r	1987	1986	1985	1984	1983	1982	1981	1980	1979
SUPPLY											
Production											
Crude Oil & Lease Condensate	16.15	17.28	17.67	18.38	18.99	18.85	18.39	18.31	18.15	18.25	18.10
Natural Gas Plant Liquids	2.16	2.26	2.22	2.15	2.24	2.27	2.18	2.19	2.31	2.25	2.29
Natural Gas	17.53	17.49	17.05	16.47	16.91	17.93	16.53	18.25	19.70	19.91	20.08
Coal	21.23	20.74	20.14	19.51	19.33	19.72	17.25	18.64	18.38	18.60	17.54
Nuclear	5.69	5.66	4.91	4.47	4.15	3.55	3.20	3.13	3.01	2.74	2.78
Hydro	2.74	2.31	2.59	3.02	2.94	3.35	3.53	3.27	2.76	2.90	2.93
Other	0.22	0.23	0.24	0.23	0.21	0.17	0.13	0.11	0.13	0.11	0.09
Total Production	**65.71**	**65.97**	**64.82**	**64.23**	**64.77**	**65.84**	**61.21**	**63.90**	**64.42**	**64.76**	**63.80**
Imports											
Crude Oil	12.51	11.03	10.07	9.00	6.81	7.30	7.08	7.42	9.34	11.19	13.83
Refined Petroleum Products	4.47	4.72	4.10	4.20	3.80	4.13	3.57	3.36	3.30	3.46	4.11
Natural Gas	1.38	1.30	0.99	0.75	0.95	0.85	0.94	0.95	0.92	1.01	1.30
Other	0.38	0.52	0.60	0.48	0.54	0.48	0.44	0.36	0.42	0.31	0.38
Total Imports	**18.74**	**17.56**	**15.76**	**14.43**	**12.10**	**12.76**	**12.03**	**12.09**	**13.97**	**15.97**	**19.62**
Adjustments	1.50	1.08	0.12r	(0.36)	1.31	(0.70)	1.00	(0.51)	(0.08)	(1.05)	(1.65)
Total Supply	**85.95**	**84.61**	**80.70r**	**78.30**	**78.18**	**77.90**	**74.24**	**75.48**	**78.32**	**79.68**	**81.77**
DISPOSITION											
Exports											
Coal	2.65	2.50	2.09	2.25	2.44	2.15	2.04	2.79	2.94	2.42	1.75
Other	2.07	1.91	1.76	1.81	1.80	1.65	1.68	1.84	1.38	1.30	1.11
Total Exports	**4.72**	**4.41**	**3.85**	**4.05r**	**4.23**	**3.80**	**3.72**	**4.63**	**4.33**	**3.72**	**2.87**
Consumption											
Refined Petroleum Products	34.02	34.23	32.87	32.20	30.92	31.05	30.05	30.23	31.93	34.20	37.12
Natural Gas	19.50	18.55	17.74r	16.71	17.83	18.51	17.36	18.51	19.93	20.39	20.67
Coal	18.92	18.85	18.01	17.26	17.48	17.07	15.89	15.32	15.91	15.42	15.04
Nuclear	5.69	5.66	4.91	4.47	4.15	3.55	3.20	3.13	3.01	2.74	2.78
Hydro	2.85	2.64	3.07	3.39	3.36	3.76	3.90	3.57	3.11	3.12	3.14
Other	0.25	0.27	0.25	0.21	0.20	0.16	0.12	0.09	0.11	0.08	0.15
Total Consumption	**81.23**	**80.20**	**76.84r**	**74.24**	**73.95**	**74.10**	**70.52**	**70.85**	**73.99**	**75.96**	**78.90**
Total Disposition	**85.95**	**84.61**	**80.70r**	**78.30**	**78.18**	**77.90**	**74.24**	**75.48**	**78.32**	**79.68**	**81.77**

	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969
SUPPLY										
Production										
Crude Oil & Lease Condensate	18.43	17.45	17.26	17.73	18.57	19.49	20.04	20.03	20.40	19.56
Natural Gas Plant Liquids	2.25	2.33	2.33	2.37	2.47	2.57	2.60	2.54	2.51	2.42
Natural Gas	19.49	19.57	19.48	19.64	21.21	22.19	22.21	22.28	21.67	20.45
Coal	14.91	15.76	15.65	14.99	14.07	13.99	14.09	13.19	14.61	13.86
Nuclear	3.02	2.70	2.11	1.90	1.27	0.91	0.58	0.41	0.24	0.15
Hydro	2.94	2.33	2.98	3.15	3.18	2.86	2.86	2.82	2.63	2.65
Other	0.07	0.08	0.08	0.07	0.06	0.05	0.03	0.02	0.02	0.02
Total Production	**61.10**	**60.22**	**59.89**	**59.86**	**60.84**	**62.06**	**62.42**	**61.29**	**62.07**	**59.10**
Imports										
Crude Oil	13.46	14.03	11.24	8.72	7.40	6.89	4.71	3.57	2.81	2.99
Refined Petroleum Products	4.36	4.73	4.43	4.23	5.73	6.58	5.59	4.97	4.66	3.91
Natural Gas	0.99	1.04	0.99	0.98	0.99	1.06	1.05	0.96	0.85	0.75
Other	0.44	0.30	0.18	0.19	0.30	0.21	0.11	0.08	0.07	0.06
Total Imports	**19.25**	**20.09**	**16.84**	**14.11**	**14.41**	**14.73**	**11.46**	**9.58**	**8.39**	**7.71**
Adjustments	(0.34)	(1.95)	(0.18)	(1.07)	(0.48)	(0.46)	(0.48)	(0.82)	(1.37)	(0.47)
Total Supply	**80.02**	**78.36**	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**	**66.34**
DISPOSITION										
Exports										
Coal	1.08	1.44	1.60	1.76	1.62	1.43	1.53	1.55	1.94	1.53
Other	0.86	0.63	0.59	0.60	0.60	0.63	0.61	0.63	0.73	0.62
Total Exports	**1.93**	**2.07**	**2.19**	**2.36**	**2.22**	**2.05**	**2.14**	**2.18**	**2.66**	**2.15**
Consumption										
Refined Petroleum Products	37.97	37.12	35.17	32.73	33.45	34.84	32.95	30.56	29.52	28.34
Natural Gas	20.00	19.93	20.35	19.95	21.73	22.51	22.70	22.47	21.79	20.68
Coal	13.77	13.92	13.58	12.66	12.66	12.97	12.08	11.60	12.26	12.38
Nuclear	3.02	2.70	2.11	1.90	1.27	0.91	0.58	0.41	0.24	0.15
Hydro	3.14	2.51	3.07	3.22	3.31	3.01	2.94	2.86	2.65	2.66
Other	0.19	0.10	0.08	0.09	1.12	0.04	0.01	(0.02)	(0.04)	(0.02)
Total Consumption	**78.09**	**76.29**	**74.36**	**70.55**	**72.54**	**74.28**	**71.26**	**67.89**	**66.43**	**64.19**
Total Disposition	**80.02**	**78.36**	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**	**66.34**

Note: Total may not equal sum of components due to independent rounding.
( ) Denotes negative value. p Preliminary. r Revised.
Source: U.S. Department of Energy. Energy Information Administration. Annual Energy Review 1989.

TABLE 33

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES

BY KIND OF FUEL, BY SECTOR*
(QUADRILLION BTU)

	1989p	1988r	1987	1986	1985	1984
Coal						
Residential & Commercial	0.15	0.17	0.16	0.18	0.18	0.21
Industrial	2.82	2.83	2.67	2.64	2.76	2.84
Transportation	**	**	**	**	**	**
Electric Utilities	15.96	15.85	15.17	14.44	14.54	14.02
Total	18.92	18.85	18.01	17.26	17.48	17.07
Natural Gas (Dry)						
Residential & Commercial	7.66	7.51	6.95r	6.82	7.08	7.29
Industrial	8.27	7.69	7.33r	6.69	7.08	7.45
Transportation	0.58	0.63	0.54	0.50	0.52	0.55
Electric Utilities	2.85	2.71	2.94	2.69	3.16	3.22
Total	19.36	18.55	17.75r	16.71	17.83	18.51
Petroleum						
Residential & Commercial	2.67	2.69	2.62	2.58	2.57	2.59
Industrial	8.32	8.46	8.21r	7.95r	7.73r	7.89r
Transportation	21.54	21.51	20.78r	20.22r	19.53r	19.29r
Electric Utilities	1.68	1.56	1.26	1.45	1.09	1.29
Total	34.21	34.23	32.87	32.20	30.92	31.05

Note: Total may not equal sum of components due to independent rounding.

**Sector data excludes electricity sales and energy losses attributed to electric generation.*

***Since 1978 the amount of coal consumed by the transportation sector has been negligible.*

Total consumption by fuels will not agree with Energy Supply and Disposition Balance (Table 32) due to data revisions.

p Preliminary. r Revised.

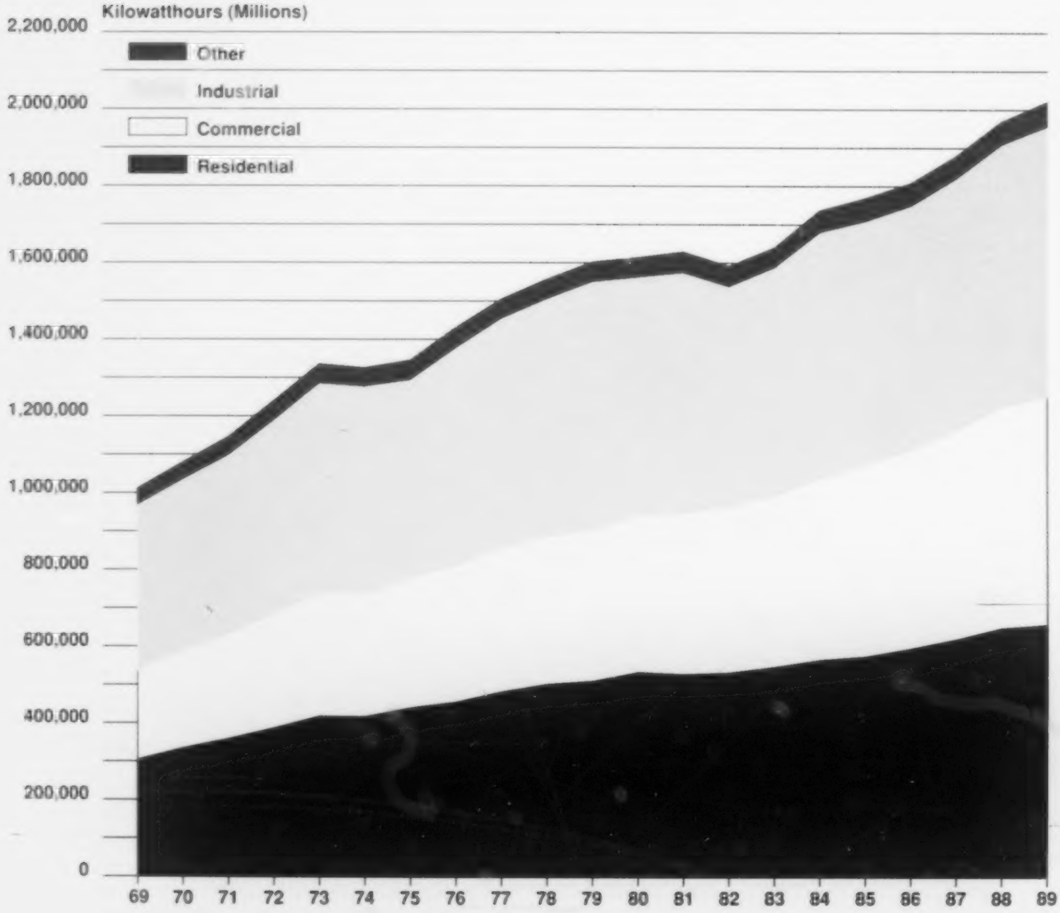
Source: U.S. Department of Energy. Energy Information Administration. Monthly Energy Review.

SECTION VI
ENERGY SALES

CHART VI-A

ENERGY SALES TO ULTIMATE CUSTOMERS

INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 39, page 44

TABLE 38

ENERGY SALES—TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Exports to Canada and Mexico	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1989p	**2,631,386**	**15,135**	**2,616,251**	**899,573**	**718,014**	**905,225**	**14,548**	**69,259**	**5,307**	**4,324**
1988r	2,561,228	7,067	2,554,161	886,070	697,832	881,790	14,609	64,560	5,078	4,222
1987	2,441,364	5,881	2,435,483	846,457	658,445	843,709	14,386	63,047	4,898	4,541
1986	2,359,560	4,816	2,354,744	820,015	628,965	818,982	15,037	61,888	4,689	5,167
1985	2,310,847	4,965	2,305,882	792,875	605,865	820,301	14,644	62,165	4,704	5,328
1984	2,283,143	2,558	2,280,585	782,608	578,083	835,486	14,205	59,894	4,483	5,826
1983	2,163,124	3,337	2,159,787	750,293	545,601	782,984	13,944	57,267	4,300	5,398
1982	2,103,281	3,540	2,099,741	732,678	516,959	770,398	14,236	55,745	4,288	5,438
1981	2,152,506	1,832	2,150,674	730,479	521,698	819,641	14,683	53,737	4,206	6,230
1980	2,130,190	4,096	2,126,094	734,411	524,122	793,812	14,832	48,284	4,275	6,358
1979	2,086,582	2,182	2,084,400	695,996	494,723	817,617	14,792	49,604	4,256	7,412
1978	2,020,004	2,186	2,017,818	679,156	480,748	782,141	14,803	49,509	4,336	7,125
1977	1,953,535	2,744	1,950,791	652,345	469,227	757,168	14,418	46,242	4,212	7,179
1976	1,852,003	2,378	1,849,625	613,072	440,625	725,169	14,413	45,625	4,338	6,383
1975	1,738,107	5,083	1,733,024	586,149	418,069	661,558	13,907	43,625	4,273	5,443
1974	1,703,495	2,726	1,700,769	554,960	392,716	689,435	13,313	40,721	4,258	5,366
1973	1,705,773	2,570	1,703,203	554,171	396,903	687,235	12,836	42,340	4,186	5,532
1972	1,580,466	2,752	1,577,714	511,423	361,859	639,467	12,193	43,190	4,440	5,142
1971	1,469,955	3,514	1,466,441	479,080	333,752	592,700	11,673	39,819	4,537	4,880
1970	1,395,568	4,209	1,391,359	447,795	312,750	572,522	11,183	37,816	4,633	4,660
1969	1,311,008	3,830	1,307,178	407,922	286,686	557,220	10,772	35,861	4,531	4,186

Note: Total may not equal sum of components due to independent rounding.
**Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 39

ENERGY SALES—INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Sales for Resale†	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1989p	**2,128,825**	**108,601**	**2,020,224**	**657,377**	**592,716**	**706,901**	**10,431**	**48,414**	**2,474**	**1,911**
1988r	2,078,543	109,468	1,969,075	648,522	575,617	685,836	10,399	44,415	2,399	1,887
1987	1,986,233	106,675	1,879,558	618,496	544,616	658,417	10,395	43,195	2,239	2,200
1986	1,913,682	105,621	1,808,061	594,019	518,639	637,116	10,348	42,948	2,261	2,729
1985	1,871,702	102,773	1,768,929	573,253	498,320	638,513	10,339	43,565	2,252	2,687
1984	1,841,195	104,168	1,737,027	563,703	473,470	643,466	10,379	40,760	2,045	3,204
1983	1,749,915	109,540	1,640,375	546,080	445,300	597,405	10,445	36,396	1,929	2,820
1982	1,701,020	109,796	1,591,224	530,713	431,598	576,380	10,716	36,967	1,924	2,925
1981	1,745,234	116,248	1,628,986	527,119	420,014	628,481	10,918	37,623	1,939	2,892
1980	1,732,553	118,745	1,613,808	532,025	408,265	623,472	10,820	34,449	2,156	2,621
1979	1,719,640	117,408	1,602,232	509,655	394,511	648,031	10,854	34,165	2,103	2,913
1978	1,675,477	118,716	1,556,761	501,409	384,726	620,470	11,042	34,386	2,085	2,643
1977	1,619,820	115,409	1,504,411	481,167	375,903	598,042	10,912	33,208	2,450	2,729
1976	1,530,286	99,496	1,430,790	453,774	355,555	569,134	11,276	34,810	3,930	2,311
1975	1,447,147	101,273	1,345,874	439,496	340,082	515,798	10,868	33,528	4,158	1,944
1974	1,418,958	93,201	1,325,757	416,333	319,706	542,234	10,409	30,876	4,161	2,038
1973	1,417,386	82,990	1,334,396	416,851	323,018	545,912	10,034	32,452	4,086	2,043
1972	1,316,379	76,572	1,239,807	386,561	297,028	507,080	9,581	33,491	4,333	1,733
1971	1,215,614	70,009	1,145,605	358,564	272,703	468,512	9,206	30,618	4,424	1,578
1970	1,142,777	63,032	1,079,745	333,895	254,684	447,664	8,814	28,721	4,520	1,447
1969	1,070,721	58,641	1,012,080	304,497	232,965	433,422	8,441	26,928	4,417	1,410

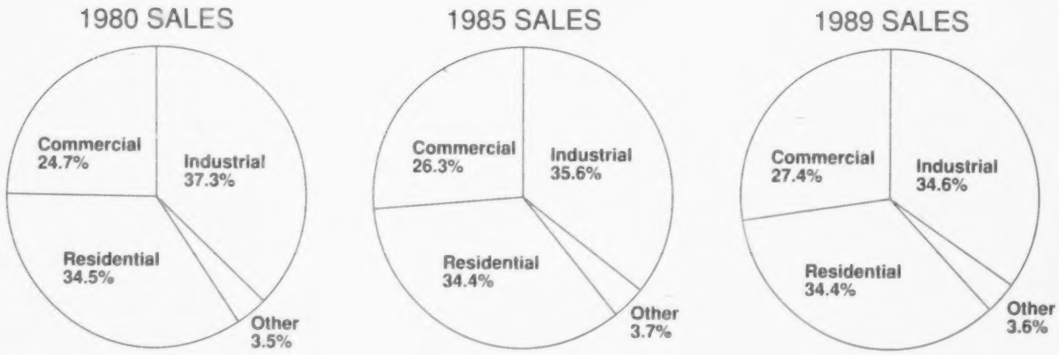
Note: Total may not equal sum of components due to independent rounding.
† To non-investor-owned electric utilities and exports.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 40
ENERGY SALES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE

Year	Residential	Commercial	Industrial	Street & Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1989p	**34.4%**	**27.4%**	**34.6%**	**0.6%**	**2.6%**	**0.2%**	**0.2%**
1988r	34.7	27.3	34.5	0.6	2.5	0.2	0.2
1987	34.8	27.0	34.6	0.6	2.6	0.2	0.2
1986	34.8	26.7	34.8	0.6	2.7	0.2	0.2
1985	34.4	26.3	35.6	0.6	2.7	0.2	0.2
1984	34.3	25.4	36.6	0.6	2.6	0.2	0.3
1983	34.7	25.3	36.3	0.6	2.7	0.2	0.2
1982	34.9	24.6	36.7	0.7	2.7	0.2	0.2
1981	34.0	24.2	38.1	0.7	2.5	0.2	0.3
1980	34.5	24.7	37.3	0.7	2.3	0.2	0.3
1979	33.4	23.7	39.2	0.7	2.4	0.2	0.4
1978	33.7	23.8	38.8	0.7	2.4	0.2	0.4
1977	33.4	24.1	38.8	0.7	2.4	0.2	0.4
1976	33.2	23.8	39.2	0.8	2.5	0.2	0.3
1975	33.8	24.1	38.2	0.8	2.5	0.3	0.3
1974	32.6	23.1	40.5	0.8	2.4	0.3	0.3
1973	32.5	23.3	40.4	0.8	2.5	0.2	0.3
1972	32.4	23.0	40.5	0.8	2.7	0.3	0.3
1971	32.7	22.8	40.4	0.8	2.7	0.3	0.3
1970	32.2	22.5	41.2	0.8	2.7	0.3	0.3
1969	31.2	21.9	42.7	0.8	2.7	0.4	0.3

Based on sales data in Table 38. p Preliminary. r Revised.

CHART VI-B
ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLLIONS



Total Sales = 2,126,094 kWh **Total Sales = 2,305,882 kWh** **Total Sales = 2,616,251 kWh**

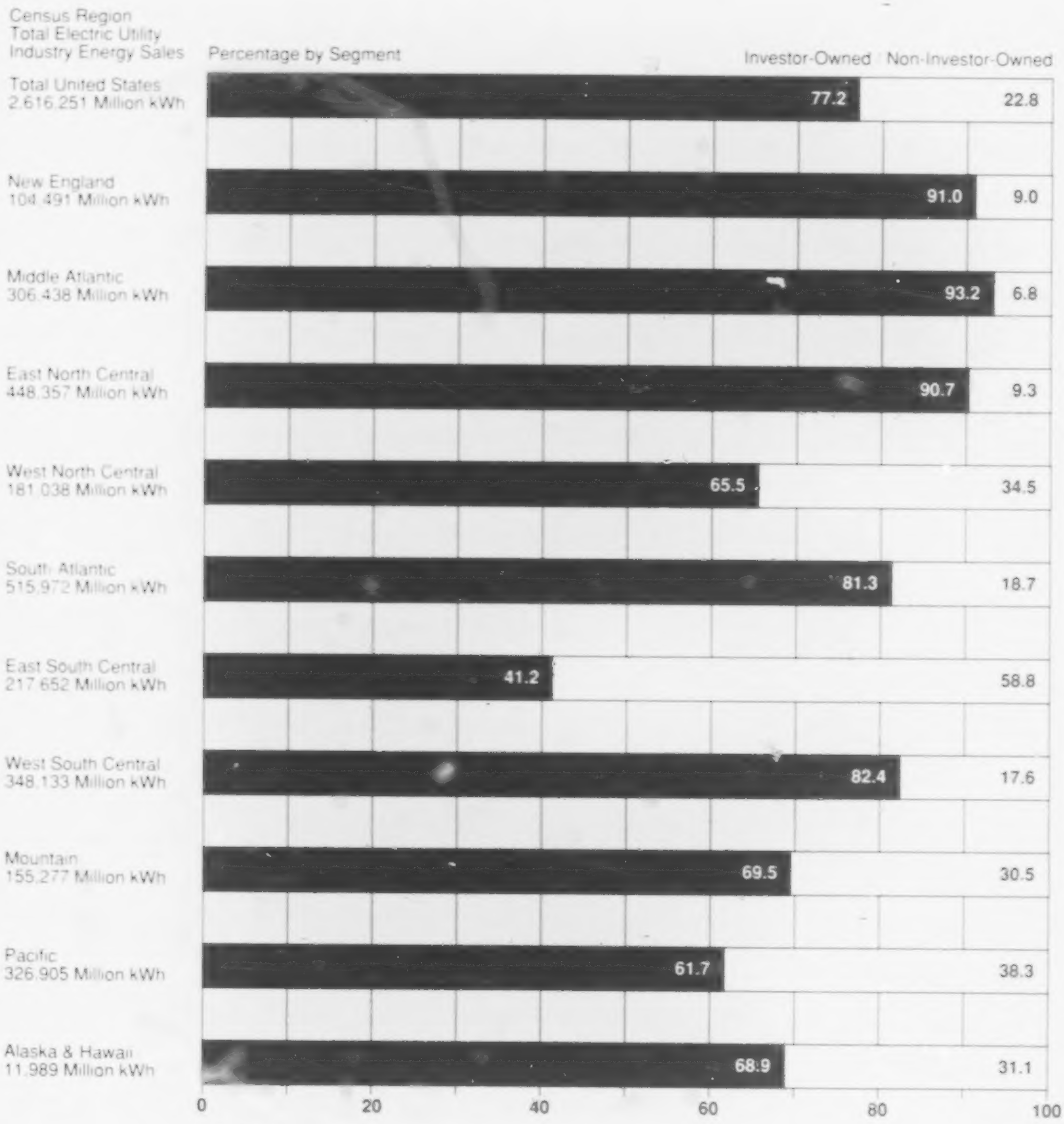
Based on Table 40, as shown above.

CHART VI-C

ENERGY SALES TO ULTIMATE CUSTOMERS

BY INVESTOR-OWNED AND NON-INVESTOR-OWNED ELECTRIC UTILITIES

1989p



p Preliminary.
Based on Table 41A, page 47 and Table 42A, page 49

TABLE 41A

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1989p—KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,616,251**	**899,573**	**718,014**	**905,225**	**14,548**	**69,259**	**5,307**	**4,324**
Maine	11,446	4,013	2,644	4,611	59	118	—	1
New Hampshire	8,744	3,548	2,014	3,079	38	65	—	—
Vermont	4,972	2,063	1,497	1,368	20	24	—	*
Massachusetts	45,627	15,938	18,214	10,369	391	588	127	—
Rhode Island	6,359	2,370	2,400	1,399	75	115	—	—
Connecticut	27,343	10,483	10,277	6,216	191	30	134	11
New England	**104,491**	**38,415**	**37,046**	**27,042**	**775**	**940**	**261**	**12**
New York	128,828	38,304	47,003	31,774	1,082	7,877	2,756	33
New Jersey	63,725	20,811	26,483	15,956	444	—	6	23
Pennsylvania	113,885	38,143	28,337	45,933	517	117	762	75
Middle Atlantic	**306,438**	**97,259**	**101,823**	**93,663**	**2,044**	**7,994**	**3,524**	**131**
Ohio	141,460	38,830	29,784	68,438	675	3,673	49	11
Indiana	67,259	22,155	15,096	29,375	325	257	13	38
Illinois	108,936	32,194	29,728	39,425	735	6,430	422	2
Michigan	82,737	25,335	20,112	36,041	483	718	—	48
Wisconsin	47,964	16,077	12,967	18,179	373	272	—	96
East North Central	**448,357**	**134,590**	**107,688**	**191,459**	**2,590**	**11,349**	**484**	**197**
Minnesota	45,568	14,781	7,587	22,524	210	454	—	12
Iowa	28,641	10,395	6,241	11,217	197	590	—	1
Missouri	50,561	20,669	17,829	11,180	261	600	8	14
North Dakota	6,848	3,026	1,597	1,752	98	373	—	3
South Dakota	6,283	2,898	1,768	1,263	49	304	—	*
Nebraska	17,330	6,670	5,554	4,326	139	587	—	54
Kansas	25,807	8,933	8,969	7,573	168	162	—	1
West North Central	**181,038**	**67,372**	**49,545**	**59,835**	**1,123**	**3,070**	**8**	**85**
Delaware	8,004	2,616	2,213	3,127	32	13	—	3
Maryland	49,188	19,053	9,979	19,504	349	13	211	79
District of Columbia	9,653	1,466	4,945	2,930	97	—	215	—
Virginia	73,614	29,636	20,010	16,167	285	7,515	—	—
West Virginia	22,835	7,625	4,916	10,205	72	18	—	—
North Carolina	86,169	32,749	22,301	29,402	336	1,336	—	45
South Carolina	53,612	17,481	11,117	24,304	125	574	—	11
Georgia	76,737	28,556	21,144	26,098	447	343	149	—
Florida	136,160	66,811	48,052	16,950	543	3,570	80	153
South Atlantic	**515,972**	**205,992**	**144,677**	**148,688**	**2,287**	**13,382**	**655**	**292**
Kentucky	58,364	16,988	9,088	22,098	230	9,917	—	43
Tennessee	73,790	29,016	7,819	36,425	400	54	—	76
Alabama	55,822	19,864	10,306	25,167	407	34	—	45
Mississippi	29,675	11,566	6,815	10,804	163	322	—	4
East South Central	**217,652**	**77,435**	**34,028**	**94,494**	**1,200**	**10,328**	**—**	**167**
Arkansas	26,198	10,141	5,940	9,595	115	407	—	—
Louisiana	61,330	20,142	12,855	25,248	293	1,714	—	1,079
Oklahoma	36,331	13,971	9,918	10,495	116	1,832	—	—
Texas	224,273	76,966	59,022	80,811	960	6,297	—	218
West South Central	**348,133**	**121,219**	**87,735**	**126,149**	**1,484**	**10,249**	**—**	**1,297**
Montana	12,790	3,453	2,829	6,306	62	116	—	25
Idaho	17,705	5,636	4,869	7,134	30	36	—	*
Wyoming	11,502	1,749	2,191	7,453	31	65	—	13
Colorado	29,406	9,579	13,247	6,110	201	211	—	58
New Mexico	13,119	3,474	4,611	4,200	75	720	—	40
Arizona	40,431	15,255	13,632	9,869	269	1,228	27	151
Utah	15,460	4,122	4,486	6,082	46	724	—	1
Nevada	14,864	5,157	3,767	5,431	93	415	—	1
Mountain	**155,277**	**48,423**	**49,632**	**52,584**	**807**	**3,515**	**27**	**288**
Washington	84,042	27,115	17,177	37,073	594	2,015	20	47
Oregon	39,432	14,203	11,185	13,778	141	81	—	44
California	203,432	63,718	73,519	56,407	1,399	6,298	328	1,762
Pacific	**326,905**	**105,035**	**101,882**	**107,259**	**2,134**	**8,394**	**349**	**1,853**
Alaska	4,018	1,593	1,861	474	50	38	—	2
Hawaii	7,970	2,239	2,098	3,580	54	—	—	—
Alaska & Hawaii	**11,989**	**3,832**	**3,959**	**4,054**	**104**	**38**	**—**	**2**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
** Less than five hundred thousand kilowatthours.*

TABLE 41B

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1988r – KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,554,161**	**886,070**	**697,832**	**881,790**	**14,609**	**64,560**	**5,078**	**4,222**
Maine	11,265	3,904	2,572	4,620	61	108	—	1
New Hampshire	8,510	3,468	1,939	3,003	39	61	—	—
Vermont	4,853	2,011	1,455	1,343	20	24	—	*
Massachusetts	44,675	15,738	17,594	10,281	391	580	91	—
Rhode Island	6,220	2,319	2,316	1,399	74	111	—	—
Connecticut	26,897	10,296	9,960	6,282	194	29	126	10
New England	**102,420**	**37,737**	**35,836**	**26,927**	**779**	**912**	**217**	**12**
New York	125,675	37,383	46,574	30,297	1,117	7,633	2,637	32
New Jersey	62,483	20,773	25,157	16,086	438	—	6	23
Pennsylvania	112,869	37,800	27,304	46,315	528	115	736	71
Middle Atlantic	**301,028**	**95,956**	**99,035**	**92,699**	**2,084**	**7,748**	**3,379**	**125**
Ohio	134,272	38,715	28,763	62,461	677	3,598	47	10
Indiana	66,112	22,280	14,880	28,315	326	258	13	40
Illinois	109,750	33,772	29,446	38,879	729	6,497	425	3
Michigan	82,541	25,348	19,553	36,307	480	802	—	52
Wisconsin	47,718	16,159	12,760	18,035	391	275	—	98
East North Central	**440,393**	**136,275**	**105,402**	**183,997**	**2,602**	**11,429**	**485**	**203**
Minnesota	45,639	14,925	7,747	22,262	211	481	—	11
Iowa	28,767	10,649	6,121	11,222	196	577	—	1
Missouri	50,363	20,992	17,280	11,223	257	588	9	14
North Dakota	6,649	2,997	1,297	1,844	97	411	—	3
South Dakota	6,227	2,901	1,733	1,232	52	310	—	*
Nebraska	17,192	6,755	5,401	4,257	139	573	—	66
Kansas	25,795	9,122	8,877	7,426	168	201	—	1
West North Central	**180,632**	**68,341**	**48,457**	**59,467**	**1,120**	**3,140**	**9**	**96**
Delaware	7,527	2,532	2,105	2,843	31	13	—	4
Maryland	47,561	18,481	10,938	17,522	335	12	191	81
District of Columbia	9,380	1,465	4,793	2,809	98	—	215	—
Virginia	70,371	28,627	18,823	15,572	273	7,076	—	—
West Virginia	22,371	7,535	4,812	9,936	71	17	—	*
North Carolina	83,858	32,268	21,404	28,521	328	1,292	—	44
South Carolina	52,733	17,181	10,700	24,160	123	557	—	10
Georgia	74,291	27,772	19,891	25,729	420	334	145	—
Florida	128,570	62,868	44,958	16,649	526	3,357	75	136
South Atlantic	**496,661**	**198,730**	**138,425**	**143,742**	**2,205**	**12,657**	**626**	**276**
Kentucky	54,121	16,915	8,779	21,316	227	6,842	—	43
Tennessee	72,259	28,775	7,631	35,351	390	54	—	58
Alabama	56,739	19,692	10,012	26,549	403	36	—	48
Mississippi	28,276	11,386	6,655	9,765	162	304	—	4
East South Central	**211,395**	**76,768**	**33,077**	**92,980**	**1,182**	**7,235**	**—**	**153**
Arkansas	25,505	10,133	5,873	8,998	112	390	—	—
Louisiana	59,121	19,449	12,507	23,964	292	1,814	—	1,095
Oklahoma	36,252	14,248	9,772	10,229	139	1,865	—	—
Texas	219,435	74,847	57,384	79,965	951	6,067	—	221
West South Central	**340,313**	**118,677**	**85,535**	**123,156**	**1,494**	**10,135**	**—**	**1,316**
Montana	12,624	3,308	2,803	6,291	66	132	—	24
Idaho	17,073	5,397	4,784	6,826	30	36	—	*
Wyoming	11,095	1,721	2,211	7,054	31	63	—	16
Colorado	28,782	9,550	13,002	5,816	195	219	—	—
New Mexico	12,703	3,404	4,409	4,096	74	686	—	34
Arizona	38,717	14,717	12,911	9,557	264	1,144	26	98
Utah	15,064	4,150	4,506	5,700	48	659	—	1
Nevada	13,461	4,824	3,568	4,642	89	338	—	1
Mountain	**149,518**	**47,070**	**48,194**	**49,981**	**796**	**3,278**	**26**	**173**
Washington	81,555	25,718	17,097	36,002	710	1,969	18	40
Oregon	38,187	13,826	10,749	13,341	143	84	—	44
California	200,404	63,269	72,077	55,632	1,389	5,939	318	1,780
Pacific	**320,146**	**102,813**	**99,923**	**104,975**	**2,242**	**7,992**	**336**	**1,864**
Alaska	3,938	1,555	1,933	368	48	32	—	2
Hawaii	7,719	2,148	2,014	3,499	58	—	—	—
Alaska & Hawaii	**11,657**	**3,703**	**3,947**	**3,866**	**106**	**32**	**—**	**2**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred thousand kilowatthours.*

TABLE 42A

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1989p—KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,020,224**	**657,377**	**592,716**	**706,901**	**10,431**	**48,414**	**2,474**	**1,911**
Maine	11,139	3,861	2,591	4,517	56	113	—	—
New Hampshire	8,005	3,104	1,800	3,000	35	65	—	—
Vermont	4,074	1,640	1,383	1,029	15	7	—	—
Massachusetts	39,764	13,784	16,989	8,176	333	356	127	—
Rhode Island	6,328	2,351	2,396	1,391	75	115	—	—
Connecticut	25,794	10,066	9,924	5,487	182	—	134	—
New England	**95,104**	**34,805**	**35,084**	**23,601**	**697**	**656**	**261**	—
New York	112,081	36,824	46,452	25,260	591	2,885	35	33
New Jersey	62,466	20,291	26,210	15,497	439	—	6	23
Pennsylvania	111,085	36,335	27,809	45,505	496	103	762	75
Middle Atlantic	**285,632**	**93,451**	**100,471**	**86,262**	**1,526**	**2,988**	**804**	**131**
Ohio	131,474	33,840	27,951	65,428	628	3,565	49	11
Indiana	56,951	16,386	13,498	26,580	268	167	13	38
Illinois	102,241	28,609	27,877	38,400	716	6,214	422	2
Michigan	75,278	22,618	17,773	33,826	417	595	—	48
Wisconsin	40,920	12,907	11,388	16,038	323	226	—	38
East North Central	**406,863**	**114,361**	**98,488**	**180,272**	**2,352**	**10,768**	**484**	**138**
Minnesota	32,890	7,607	4,774	20,067	151	279	—	12
Iowa	22,077	6,695	5,387	9,446	174	375	—	1
Missouri	37,884	13,557	14,680	9,104	216	325	—	2
North Dakota	3,758	1,573	787	1,267	47	81	—	3
South Dakota	3,376	1,221	1,169	932	28	26	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	18,620	6,266	6,547	5,641	143	21	—	1
West North Central	**118,604**	**36,919**	**33,343**	**46,456**	**759**	**1,108**	—	**19**
Delaware	6,547	1,906	1,931	2,677	30	—	—	3
Maryland	46,306	17,358	9,283	19,144	232	—	211	79
District of Columbia	9,653	1,466	4,945	2,930	97	—	215	—
Virginia	65,131	24,809	18,743	13,910	264	7,406	—	—
West Virginia	22,742	7,571	4,895	10,189	70	18	—	—
North Carolina	67,739	22,382	18,052	25,980	244	1,075	—	6
South Carolina	37,610	10,578	8,422	18,022	93	484	—	11
Georgia	54,805	15,244	16,683	22,362	281	86	149	—
Florida	108,942	52,812	39,534	12,795	402	3,165	80	153
South Atlantic	**419,476**	**154,125**	**122,487**	**128,009**	**1,713**	**12,234**	**655**	**254**
Kentucky	35,794	9,413	6,855	9,485	143	9,898	—	1
Tennessee	1,591	567	285	702	5	32	—	—
Alabama	36,790	11,347	7,916	17,361	163	—	—	4
Mississippi	15,527	5,193	4,365	5,572	102	291	—	3
East South Central	**89,702**	**26,520**	**19,421**	**33,120**	**413**	**10,221**	—	**7**
Arkansas	18,113	6,047	4,519	7,088	91	368	—	—
Louisiana	53,983	15,590	11,372	24,030	286	1,627	—	1,079
Oklahoma	28,482	9,652	7,927	9,022	111	1,770	—	—
Texas	186,257	58,982	48,511	73,699	799	4,265	—	1
West South Central	**286,835**	**90,271**	**72,330**	**113,838**	**1,288**	**8,029**	—	**1,079**
Montana	7,961	2,281	2,215	3,321	50	75	—	19
Idaho	15,659	4,745	4,229	6,657	25	2	—	*
Wyoming	8,621	1,040	1,149	6,392	19	8	—	13
Colorado	19,201	5,629	9,994	3,352	144	82	—	—
New Mexico	9,682	2,582	3,175	3,236	64	598	—	28
Arizona	21,621	8,072	7,470	5,797	94	188	—	—
Utah	12,128	3,126	3,160	5,215	42	586	—	*
Nevada	13,075	4,875	3,425	4,296	90	388	—	—
Mountain	**107,949**	**32,350**	**34,815**	**38,267**	**529**	**1,927**	—	**60**
Washington	24,864	11,993	7,984	4,778	89	*	—	21
Oregon	27,158	10,697	8,761	7,535	125	*	—	40
California	149,777	49,516	57,375	41,089	885	479	270	163
Pacific	**201,798**	**72,206**	**74,119**	**53,402**	**1,099**	**479**	**270**	**223**
Alaska	291	131	60	94	1	4	—	—
Hawaii	7,970	2,239	2,098	3,580	54	—	—	—
Alaska & Hawaii	**8,261**	**2,370**	**2,158**	**3,674**	**55**	**4**	—	—

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
** Less than five hundred thousand kilowatthours.*

TABLE 42B

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1988r—KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**1,969,075**	**648,522**	**575,617**	**685,836**	**10,399**	**44,415**	**2,399**	**1,887**
Maine	10,960	3,756	2,522	4,520	58	103	—	—
New Hampshire	7,814	3,048	1,736	2,934	36	60	—	—
Vermont	3,980	1,608	1,346	1,005	14	7	—	—
Massachusetts	38,922	13,597	16,418	8,134	336	346	91	—
Rhode Island	6,189	2,301	2,311	1,392	74	111	—	—
Connecticut	25,399	9,895	9,626	5,567	74	—	126	—
New England	**93,263**	**34,206**	**33,960**	**23,551**	**702**	**627**	**217**	**—**
New York	109,226	35,906	46,025	23,786	600	2,807	70	32
New Jersey	61,249	20,257	24,887	15,642	435	—	6	22
Pennsylvania	110,103	36,017	26,784	45,887	507	101	736	71
Middle Atlantic	**280,578**	**92,180**	**97,696**	**85,315**	**1,542**	**2,908**	**811**	**125**
Ohio	124,503	33,832	26,970	59,531	629	3,485	47	10
Indiana	55,931	16,554	13,300	25,587	271	166	13	40
Illinois	103,066	30,139	27,610	37,900	710	6,280	425	3
Michigan	75,104	22,672	17,248	34,038	414	680	—	52
Wisconsin	40,717	13,016	11,168	15,925	340	229	—	39
East North Central	**399,321**	**116,212**	**96,295**	**172,982**	**2,364**	**10,839**	**485**	**144**
Minnesota	33,139	7,856	4,965	19,847	153	307	—	11
Iowa	22,199	6,918	5,274	9,470	174	363	—	1
Missouri	37,765	13,860	14,414	8,962	213	315	—	2
North Dakota	3,569	1,577	607	1,211	47	124	—	3
South Dakota	3,341	1,235	1,152	891	30	33	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	18,525	6,429	6,418	5,512	143	22	—	1
West North Central	**118,539**	**37,876**	**32,830**	**45,893**	**759**	**1,163**	**—**	**18**
Delaware	6,091	1,842	1,825	2,391	29	—	—	4
Maryland	44,891	16,913	10,309	17,168	228	—	191	81
District of Columbia	9,380	1,465	4,793	2,809	98	—	215	—
Virginia	62,185	23,945	17,601	13,419	252	6,968	—	—
West Virginia	22,278	7,481	4,791	9,920	70	17	—	*
North Carolina	65,741	22,105	17,256	25,110	235	1,029	—	6
South Carolina	36,699	10,436	8,090	17,603	92	468	—	10
Georgia	52,906	14,867	15,597	21,946	267	82	145	—
Florida	102,442	49,474	36,812	12,598	386	2,959	75	136
South Atlantic	**402,612**	**148,530**	**117,072**	**122,964**	**1,658**	**11,523**	**626**	**238**
Kentucky	32,272	9,444	6,633	9,230	141	6,822	—	1
Tennessee	1,530	565	273	656	5	31	—	—
Alabama	36,090	11,332	7,711	16,881	162	—	—	4
Mississippi	14,812	5,117	4,211	5,107	101	274	—	2
East South Central	**84,704**	**26,459**	**18,828**	**31,875**	**408**	**7,127**	**—**	**7**
Arkansas	17,876	6,106	4,444	6,887	89	351	—	—
Louisiana	52,353	15,359	11,063	22,821	286	1,730	—	1,095
Oklahoma	28,291	9,865	7,853	8,637	134	1,803	—	—
Texas	182,440	57,411	47,136	72,982	791	4,118	—	1
West South Central	**280,961**	**88,740**	**70,496**	**111,328**	**1,299**	**8,001**	**—**	**1,096**
Montana	7,739	2,196	2,157	3,238	55	75	—	18
Idaho	15,072	4,537	4,147	6,362	25	2	—	*
Wyoming	8,234	1,029	1,156	6,007	20	7	—	16
Colorado	[illegible]	5,633	9,884	3,150	141	86	—	—
New Mexico	[illegible]	2,524	3,055	3,107	63	567	—	21
Arizona	[illegible]	7,744	7,051	5,550	95	174	—	(10)
Utah	[illegible]	3,153	3,153	4,884	44	542	—	*
Nevada	[illegible]	4,554	3,248	3,667	86	320	—	—
Mountain	**103,531**	**31,370**	**33,850**	**35,965**	**528**	**1,773**	**—**	**46**
Washington	23,534	11,289	7,582	4,560	87	*	—	16
Oregon	26,403	10,392	8,426	7,414	128	3	—	39
California	147,627	48,996	56,506	40,400	864	445	260	157
Pacific	**197,564**	**70,677**	**72,514**	**52,374**	**1,079**	**448**	**260**	**212**
Alaska	283	125	62	91	1	5	—	—
Hawaii	7,719	2,148	2,014	3,499	58	—	—	—
Alaska & Hawaii	**8,002**	**2,273**	**2,076**	**3,589**	**59**	**5**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred thousand kilowatthours.*
( ) Denotes negative value.

TABLE 43

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1984–1989—KILOWATTHOURS IN MILLIONS

Year—Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
YEAR—1989p								
First Quarter	649,915	239,231	70,131	218,012	3,721	16,440	1,379	1,001
Second Quarter	616,142	195,871	72,954	225,173	3,347	16,441	1,257	1,099
Third Quarter	707,958	249,402	199,325	234,959	3,543	18,217	1,297	1,215
Fourth Quarter	642,235	215,069	175,604	227,081	3,937	18,161	1,374	1,009
Total	**2,616,251**	**899,573**	**718,014**	**905,225**	**14,548**	**69,259**	**5,307**	**4,324**
YEAR—1988r								
First Quarter	639,556	239,079	166,908	211,725	3,730	15,877	1,328	910
Second Quarter	590,981	186,056	165,021	218,766	3,462	15,475	1,202	998
Third Quarter	707,865	256,882	198,132	229,886	3,516	17,069	1,262	1,118
Fourth Quarter	615,760	204,053	167,771	221,413	3,901	16,139	1,286	1,196
Total	**2,554,161**	**886,070**	**697,832**	**881,790**	**14,609**	**64,560**	**5,078**	**4,222**
YEAR—1987								
First Quarter	596,074	222,024	154,347	198,342	3,736	15,174	1,317	1,132
Second Quarter	577,204	186,784	158,928	210,166	3,462	15,473	1,156	1,235
Third Quarter	674,355	243,735	186,437	221,563	3,427	16,885	1,185	1,124
Fourth Quarter	587,849	193,914	158,733	213,638	3,760	15,515	1,240	1,048
Total	**2,435,483**	**846,457**	**658,445**	**843,709**	**14,386**	**63,047**	**4,898**	**4,541**
YEAR—1986								
First Quarter	589,664	219,324	149,107	199,433	3,887	15,378	1,255	1,280
Second Quarter	550,583	175,028	150,349	204,504	3,468	14,940	1,101	1,193
Third Quarter	638,346	229,897	175,803	210,250	3,639	16,228	1,129	1,399
Fourth Quarter	576,151	195,766	153,706	204,795	4,043	15,341	1,205	1,294
Total	**2,354,744**	**820,015**	**628,965**	**818,982**	**15,037**	**61,888**	**4,689**	**5,167**
YEAR—1985								
First Quarter	586,992	219,633	144,927	200,734	3,835	15,249	1,261	1,354
Second Quarter	542,301	169,611	144,271	206,463	3,531	15,946	1,113	1,368
Third Quarter	617,375	216,280	168,097	211,362	3,411	15,739	1,127	1,358
Fourth Quarter	559,214	187,351	148,570	201,742	3,868	15,232	1,202	1,249
Total	**2,305,882**	**792,875**	**605,865**	**820,301**	**14,644**	**62,165**	**4,704**	**5,328**
YEAR—1984								
First Quarter	583,026	217,917	140,257	203,628	3,727	14,960	1,215	1,321
Second Quarter	539,133	170,463	136,287	211,638	3,482	14,703	1,062	1,498
Third Quarter	611,181	213,027	161,409	215,244	3,360	15,465	1,083	1,594
Fourth Quarter	547,244	181,201	140,130	204,976	3,635	14,765	1,124	1,413
Total	**2,280,585**	**782,608**	**578,083**	**835,486**	**14,205**	**59,894**	**4,483**	**5,826**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 44

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY QUARTER AND CLASS OF SERVICE
1984-1989—KILOWATTHOURS IN MILLIONS

Year—Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR—1989p								
First Quarter	499,856	173,441	140,542	170,756	2,719	11,341	619	438
Second Quarter	478,336	143,650	142,823	176,977	2,422	11,367	579	518
Third Quarter	545,555	181,941	164,698	182,421	2,483	12,818	625	569
Fourth Quarter	496,477	158,345	144,653	176,747	2,807	12,888	651	386
Total	**2,020,224**	**657,377**	**592,716**	**706,901**	**10,431**	**48,414**	**2,474**	**1,911**
YEAR—1988r								
First Quarter	490,791	173,877	137,619	164,673	2,728	10,930	604	360
Second Quarter	457,139	136,678	136,077	170,380	2,423	10,595	572	414
Third Quarter	545,694	187,959	163,804	178,470	2,474	11,861	624	502
Fourth Quarter	475,451	150,008	138,117	172,313	2,774	11,029	599	611
Total	**1,969,075**	**648,522**	**575,617**	**685,836**	**10,399**	**44,415**	**2,399**	**1,887**
YEAR—1987								
First Quarter	458,492	161,532	127,538	155,143	2,757	10,346	582	595
Second Quarter	446,568	136,661	131,473	164,351	2,399	10,523	539	621
Third Quarter	520,148	177,744	154,383	172,644	2,463	11,831	555	528
Fourth Quarter	454,350	142,560	131,221	166,279	2,776	10,495	563	456
Total	**1,879,558**	**618,496**	**544,616**	**658,417**	**10,395**	**43,195**	**2,239**	**2,200**
YEAR—1986								
First Quarter	451,114	158,240	122,675	155,507	2,768	10,634	592	699
Second Quarter	424,612	127,239	124,271	159,089	2,356	10,490	544	624
Third Quarter	488,815	165,646	145,051	162,995	2,494	11,330	551	749
Fourth Quarter	443,519	142,894	126,642	159,526	2,729	10,495	575	657
Total	**1,808,061**	**594,019**	**518,639**	**637,116**	**10,348**	**42,948**	**2,261**	**2,729**
YEAR—1985								
First Quarter	446,638	157,530	119,021	155,471	2,766	10,547	594	710
Second Quarter	417,274	123,040	118,800	160,551	2,357	11,314	533	680
Third Quarter	474,423	156,403	138,465	164,672	2,485	11,140	548	710
Fourth Quarter	430,594	136,279	122,035	157,819	2,731	10,564	578	588
Total	**1,768,929**	**573,253**	**498,320**	**638,513**	**10,339**	**43,565**	**2,252**	**2,687**
YEAR—1984								
First Quarter	440,739	155,856	114,878	155,737	2,762	10,221	542	744
Second Quarter	411,234	123,517	111,747	162,385	2,361	9,935	485	803
Third Quarter	466,477	153,472	132,327	166,206	2,506	10,596	499	873
Fourth Quarter	418,576	130,859	114,518	159,138	2,749	10,009	518	784
Total	**1,737,027**	**563,703**	**473,470**	**643,466**	**10,379**	**40,760**	**2,045**	**3,204**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 45

AVERAGE ANNUAL KWH USE PER CUSTOMER

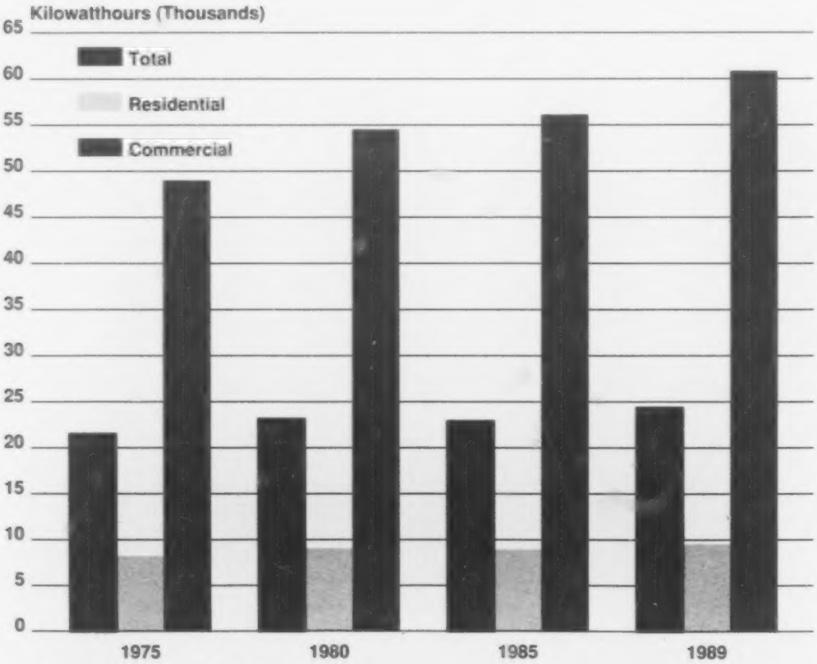
TOTAL ELECTRIC UTILITY INDUSTRY					INVESTOR-OWNED ELECTRIC UTILITIES				
Year	Total Ultimate Customers	Residential	Commercial	Industrial	Year	Total Ultimate Customers	Residential	Commercial	Industrial
1989p	**24,343**	**9,489**	**60,823**	**1,800,780**	**1989p**	**24,540**	**9,059**	**65,218**	**1,869,125**
1988r	24,167	9,498	60,437	1,784,084	1988r	24,325	9,082	64,748	1,862,303
1987	23,472	9,236	58,409	1,719,914	1987	23,653	8,816	62,801	1,813,586
1986	23,071	9,090	57,161	1,625,242	1986	23,201	8,627	61,462	1,726,461
1985	22,903	8,906	56,109	1,598,675	1985	23,149	8,487	60,517	1,699,809
1984	23,152	8,978	55,205	1,661,280	1984	23,173	8,500	59,270	1,622,100
1983	22,479	8,814	53,822	1,567,077	1983	22,293	8,379	57,003	1,534,956
1982	22,197	8,743	52,260	1,431,408	1982	21,940	8,261	56,379	1,512,487
1981	23,026	8,825	53,402	1,669,211	1981	22,753	8,311	55,742	N/A
1980	23,167	9,025	54,538	N/A	1980	22,949	8,539	55,210	N/A
1979	23,481	8,843	53,197	N/A	1979	23,287	8,360	54,594	N/A
1978	23,315	8,849	53,085	N/A	1978	23,197	8,430	54,653	N/A
1977	23,052	8,693	52,892	N/A	1977	22,938	8,279	54,520	N/A
1976	22,361	8,360	50,733	N/A	1976	22,263	7,969	52,560	N/A
1975	21,417	8,176	48,964	N/A	1975	21,305	7,855	50,966	N/A
1974	21,448	7,907	46,557	N/A	1974	21,343	7,574	48,426	N/A
1973	21,955	8,079	47,580	N/A	1973	21,989	7,769	49,550	N/A
1972	20,964	7,691	44,496	N/A	1972	21,002	7,413	46,565	N/A
1971	19,956	7,380	41,943	N/A	1971	19,917	7,062	43,596	N/A
1970	19,380	7,066	39,952	N/A	1970	19,167	6,720	41,272	N/A
1969	18,563	6,571	36,950	N/A	1969	18,305	6,253	38,025	N/A

Based on sales data in Tables 38 and 39, and average number of customers per year. p Preliminary. r Revised.
N/A Not Available.

CHART VI-D

AVERAGE KILOWATTHOURS USED

TOTAL ELECTRIC UTILITY INDUSTRY



Based on Table 45, as shown above.

SECTION VII
CUSTOMERS

TABLE 47
ULTIMATE CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1989p	**108,412,083**	**95,567,212**	**11,973,485**	**500,369**	**175,456**	**193,681**	**28**	**1,852**
1988r	106,411,256	93,921,875	11,637,444	491,292	169,792	188,954	28	1,871
1987	104,624,233	92,399,323	11,386,008	487,572	165,188	184,369	27	1,746
1986	102,952,793	90,994,586	11,114,300	498,254	161,377	182,257	28	1,991
1985	101,579,271	89,819,726	10,920,861	499,728	158,307	178,759	28	1,862
1984	99,371,026	87,938,995	10,565,239	525,692	139,703	199,393	29	1,975
1983	96,985,531	85,842,195	10,266,449	500,215	153,659	219,879	31	3,103
1982	95,250,268	84,371,779	9,976,274	533,635	148,678	216,975	31	2,896
1981	94,011,299	83,304,355	9,847,260	516,996	141,051	197,187	31	4,419
1980	92,653,471	82,153,162	9,698,809	484,652	142,724	168,120	30	5,974
1979	89,771,985	79,620,180	9,386,572	477,874	124,228	158,098	30	5,003
1978	87,667,954	77,775,667	9,148,399	464,637	121,899	152,439	30	4,883
1977	85,590,212	75,923,145	8,943,732	448,009	120,594	149,934	28	4,770
1976	83,613,161	74,161,846	8,750,949	427,403	119,130	148,867	28	4,938
1975	81,844,890	72,570,187	8,591,108	414,665	116,555	147,387	29	4,959
1974	80,102,390	70,949,607	8,472,817	422,736	112,477	139,480	29	5,244
1973	78,461,251	69,438,429	8,361,847	413,383	108,787	133,619	46	5,140
1972	76,150,204	67,314,000	8,200,033	369,952	103,874	157,461	50	4,834
1971	74,265,071	65,650,046	8,002,572	355,967	96,252	155,414	48	4,772
1970	72,484,978	64,017,662	7,865,073	352,993	92,052	152,706	47	4,445
1969	70,929,138	62,598,910	7,744,851	348,648	86,678	145,071	49	4,931

**Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*

p Preliminary. *r Revised.*

TABLE 48

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
1989p	**83,034,837**	**73,182,186**	**9,181,854**	**376,809**	**137,588**	**155,920**	**22**	**458**
1988r	81,673,876	72,036,602	8,985,299	367,854	131,711	151,898	22	490
1987	80,232,499	70,826,711	8,768,207	360,468	127,644	149,022	21	426
1986	78,717,500	69,548,070	8,535,188	364,294	123,525	145,957	22	444
1985	77,203,821	68,234,704	8,340,862	363,757	121,395	142,621	22	460
1984	75,709,055	66,987,481	8,066,025	396,304	117,874	140,907	23	441
1983	74,247,765	65,718,130	7,886,857	387,875	115,170	139,233	23	477
1982	72,979,298	64,648,932	7,702,142	378,016	113,251	136,484	23	450
1981	72,037,264	63,820,699	7,579,344	389,646	112,061	135,049	23	442
1980	70,996,563	62,902,588	7,459,959	375,540	123,589	134,595	23	269
1979	69,581,540	61,676,402	7,290,125	372,407	108,149	134,171	23	263
1978	67,922,975	60,216,110	7,106,705	364,123	106,286	129,496	23	232
1977	66,294,706	58,770,646	6,942,201	349,563	105,442	126,611	21	222
1976	64,896,400	57,530,599	6,805,345	329,522	103,754	126,674	22	484
1975	63,650,468	56,409,122	6,690,374	322,429	101,937	126,100	23	483
1974	62,667,061	55,499,145	6,624,061	326,409	97,438	119,531	23	454
1973	61,435,986	54,370,297	6,531,953	324,236	94,682	114,315	24	479
1972	59,804,431	52,868,920	6,422,032	284,733	90,206	138,052	25	463
1971	58,204,164	51,415,155	6,294,907	274,329	86,714	132,573	25	461
1970	56,888,819	50,210,348	6,194,383	270,132	83,443	130,036	24	453
1969	55,714,225	49,134,168	6,111,945	265,331	78,903	123,399	25	454

** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 49

CUSTOMERS IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways*	Inter-depart-mental*
1989p	**88.2%**	**10.9%**	**0.5%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**
1988r	88.2	10.9	0.5	0.2	0.2	0.0	0.0
1987	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1986	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1985	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1984	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1983	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1982	88.6	10.5	0.6	0.1	0.2	0.0	0.0
1981	88.6	10.5	0.5	0.2	0.2	0.0	0.0
1980	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1979	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1978	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1977	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1976	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1975	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1974	88.6	10.6	0.5	0.1	0.2	0.0	0.0
1973	88.5	10.7	0.5	0.1	0.2	0.0	0.0
1972	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1971	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1970	88.3	10.9	0.5	0.1	0.2	0.0	0.0
1969	88.3	10.9	0.5	0.1	0.2	0.0	0.0

** Less than one-tenth of one percent. p Preliminary. r Revised.*
Based on customer data in Table 47.

TABLE 50A

ULTIMATE CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1989p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**108,412,083**	**95,567,212**	**11,973,485**	**500,369**	**175,456**	**193,681**	**28**	**1,852**
Maine	632,605	562,266	66,357	2,789	1,073	117	—	3
New Hampshire	555,098	481,622	70,740	1,642	664	430	—	—
Vermont	292,019	254,996	34,977	1,236	306	502	—	2
Massachusetts	2,606,281	2,309,406	276,969	12,050	5,126	2,729	1	—
Rhode Island	433,061	385,160	44,302	2,689	878	32	—	—
Connecticut	1,433,989	1,300,149	124,992	4,730	4,081	30	1	6
New England	**5,953,053**	**5,293,599**	**618,337**	**25,136**	**12,128**	**3,840**	**2**	**11**
New York	7,084,560	6,233,665	812,755	12,131	9,835	16,167	5	2
New Jersey	3,301,180	2,896,078	383,811	12,362	8,926	—	1	2
Pennsylvania	5,172,583	4,611,905	522,806	30,015	7,201	651	4	1
Middle Atlantic	**15,558,323**	**13,741,648**	**1,719,372**	**54,508**	**25,962**	**16,818**	**10**	**5**
Ohio	4,664,063	4,178,632	438,183	30,363	6,360	10,509	2	14
Indiana	2,413,845	2,156,696	237,241	14,539	3,854	1,512	1	2
Illinois	4,780,500	4,322,068	436,374	6,833	2,967	12,252	2	4
Michigan	4,038,777	3,641,061	377,842	14,047	3,695	2,129	—	3
Wisconsin	2,221,474	1,972,192	238,459	5,113	4,804	787	—	119
East North Central	**18,118,659**	**16,270,649**	**1,728,099**	**70,895**	**21,680**	**27,189**	**5**	**142**
Minnesota	1,933,935	1,734,151	182,621	8,604	3,465	5,092	—	2
Iowa	1,297,938	1,130,375	155,609	4,224	1,511	6,217	—	2
Missouri	2,366,880	2,096,973	249,902	10,091	3,902	5,960	1	51
North Dakota	309,651	261,677	44,298	1,933	730	1,010	—	3
South Dakota	327,193	282,020	41,586	1,229	1,054	1,303	—	1
Nebraska	783,574	647,581	126,701	3,406	923	4,960	—	3
Kansas	1,184,539	1,016,155	155,588	9,680	2,166	949	—	1
West North Central	**8,203,710**	**7,168,932**	**956,305**	**39,167**	**13,751**	**25,491**	**1**	**63**
Delaware	308,661	277,412	30,046	687	505	10	—	1
Maryland	1,902,935	1,711,353	180,081	10,562	916	20	2	1
District of Columbia	217,097	190,405	26,488	168	35	—	1	—
Virginia	2,584,492	2,299,202	252,955	4,796	2,077	25,462	—	—
West Virginia	853,750	747,531	94,311	10,514	1,125	269	—	—
North Carolina	3,270,702	2,852,576	391,096	14,154	10,160	2,691	—	25
South Carolina	1,603,323	1,394,956	197,932	4,408	3,482	2,530	—	15
Georgia	2,927,835	2,607,656	290,657	19,594	7,401	2,526	1	—
Florida	6,379,149	5,648,543	685,921	24,334	6,451	13,896	1	3
South Atlantic	**20,047,944**	**17,729,634**	**2,149,487**	**89,217**	**32,152**	**47,404**	**5**	**45**
Kentucky	1,671,510	1,465,913	184,556	7,733	5,021	8,280	—	7
Tennessee	2,261,917	1,965,168	275,009	19,010	1,053	1,660	—	17
Alabama	1,867,608	1,625,833	228,901	9,139	2,412	1,311	—	12
Mississippi	1,130,339	975,212	144,836	5,435	950	3,904	—	2
East South Central	**6,931,374**	**6,032,126**	**833,302**	**41,317**	**9,436**	**15,155**	**—**	**38**
Arkansas	1,141,337	998,418	118,949	19,537	1,059	3,374	—	—
Louisiana	1,801,788	1,587,305	186,813	14,835	2,392	10,441	—	2
Oklahoma	1,544,221	1,334,064	183,175	15,342	1,220	10,420	—	—
Texas	7,179,434	6,242,178	844,783	58,145	6,390	27,748	—	190
West South Central	**11,666,780**	**10,161,965**	**1,333,720**	**107,859**	**11,061**	**51,983**	**—**	**192**
Montana	409,329	342,367	60,642	2,684	3,248	154	—	234
Idaho	468,413	394,996	70,821	1,995	530	67	—	4
Wyoming	241,043	196,909	40,436	3,071	423	203	—	1
Colorado	1,574,739	1,374,543	197,451	1,310	970	461	—	4
New Mexico	666,256	570,055	90,220	4,509	407	1,005	—	60
Arizona	1,593,740	1,416,025	162,203	4,679	8,610	2,204	1	18
Utah	624,600	556,292	59,779	6,372	2,010	140	—	7
Nevada	540,724	468,761	70,783	656	370	153	—	1
Mountain	**6,118,844**	**5,319,948**	**752,335**	**25,276**	**16,568**	**4,387**	**1**	**329**
Washington	2,142,193	1,904,212	227,680	7,363	2,715	169	1	53
Oregon	1,255,752	1,093,767	158,008	2,750	1,157	53	—	17
California	11,832,691	10,350,220	1,418,967	35,682	26,495	369	3	955
Pacific	**15,230,636**	**13,348,199**	**1,804,655**	**45,795**	**30,367**	**591**	**4**	**1,025**
Alaska	220,479	188,165	30,172	509	808	823	—	2
Hawaii	362,281	312,347	47,701	690	1,543	—	—	—
Alaska & Hawaii	**582,760**	**500,512**	**77,873**	**1,199**	**2,351**	**823**	**—**	**2**

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TABLE 50B

ULTIMATE CUSTOMERS
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
AT DECEMBER 31, 1988r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**106,411,256**	**93,921,875**	**11,637,444**	**491,292**	**169,792**	**188,954**	**28**	**1,871**
Maine	619,514	551,132	64,369	2,830	1,071	109	—	3
New Hampshire	544,991	473,583	67,939	1,567	1,452	450	—	—
Vermont	285,622	249,895	33,882	1,013	305	525	—	2
Massachusetts	2,550,855	2,262,714	267,627	12,918	4,981	2,614	1	—
Rhode Island	424,977	378,889	42,529	2,681	848	30	—	—
Connecticut	1,417,916	1,287,625	121,472	4,722	4,061	29	1	6
New England	**5,843,875**	**5,203,838**	**597,818**	**25,731**	**12,718**	**3,757**	**2**	**11**
New York	7,006,300	6,172,125	798,351	10,278	9,786	15,753	5	2
New Jersey	3,262,150	2,865,943	275,380	12,481	8,343	—	1	2
Pennsylvania	5,107,880	4,558,479	511,749	29,728	7,259	660	4	1
Middle Atlantic	**15,376,330**	**13,596,547**	**1,685,480**	**52,487**	**25,388**	**16,413**	**10**	**5**
Ohio	4,613,405	4,136,545	430,016	29,930	6,330	10,566	2	16
Indiana	2,381,729	2,129,392	233,001	14,060	3,756	1,517	1	2
Illinois	4,726,251	4,276,295	428,313	6,627	2,946	12,065	2	3
Michigan	3,986,224	3,596,389	370,337	13,761	3,621	2,113	—	3
Wisconsin	2,188,959	1,944,938	233,822	5,019	4,273	789	—	118
East North Central	**17,896,568**	**16,083,559**	**1,695,489**	**69,397**	**20,926**	**27,050**	**5**	**142**
Minnesota	1,905,046	1,708,509	179,916	8,275	3,368	4,976	—	2
Iowa	1,288,891	1,123,025	154,016	4,272	1,486	6,090	—	2
Missouri	2,334,805	2,070,651	243,012	11,386	3,800	5,907	1	48
North Dakota	308,808	261,394	42,794	2,832	725	1,060	—	3
South Dakota	323,982	279,502	40,949	1,225	1,028	1,277	—	1
Nebraska	776,562	642,263	124,980	3,409	938	4,969	—	3
Kansas	1,171,704	1,002,057	156,810	9,749	2,141	946	—	1
West North Central	**8,109,798**	**7,087,401**	**942,477**	**41,148**	**13,486**	**25,225**	**1**	**60**
Delaware	300,359	270,116	29,028	703	501	10	—	1
Maryland	1,858,431	1,673,718	177,936	5,856	898	20	2	1
District of Columbia	215,180	188,760	26,216	167	36	—	1	—
Virginia	2,518,781	2,243,013	244,076	4,726	2,018	24,948	—	—
West Virginia	844,665	740,386	92,404	10,476	1,129	265	—	5
North Carolina	3,100,048	2,706,312	367,152	14,095	9,778	2,687	—	24
South Carolina	1,570,753	1,368,461	191,996	4,342	3,437	2,502	—	15
Georgia	2,853,288	2,546,932	277,178	19,627	7,105	2,445	1	—
Florida	6,189,300	5,477,518	667,576	24,988	6,109	13,105	1	3
South Atlantic	**19,450,805**	**17,215,216**	**2,073,562**	**84,980**	**31,011**	**45,982**	**5**	**49**
Kentucky	1,643,647	1,451,722	171,322	7,455	4,942	8,197	—	9
Tennessee	2,156,033	1,909,667	226,691	17,022	1,000	1,634	—	19
Alabama	1,825,136	1,604,077	208,599	8,825	2,355	1,269	—	11
Mississippi	1,103,749	962,045	131,718	5,240	932	3,812	—	2
East South Central	**6,728,565**	**5,927,511**	**738,330**	**38,542**	**9,229**	**14,912**	**—**	**41**
Arkansas	1,128,666	987,551	117,645	18,819	1,050	3,601	—	—
Louisiana	1,770,131	1,557,095	185,531	15,063	2,397	10,043	—	2
Oklahoma	1,535,069	1,326,427	182,004	15,528	1,253	9,857	—	—
Texas	7,096,119	6,169,789	837,694	58,334	3,702	26,410	—	190
West South Central	**11,529,985**	**10,040,862**	**1,322,874**	**107,744**	**8,402**	**49,911**	**—**	**192**
Montana	432,438	361,620	62,232	4,878	3,280	156	—	272
Idaho	460,730	389,103	69,125	1,916	522	63	—	1
Wyoming	240,852	197,159	40,278	2,795	416	202	—	2
Colorado	1,559,284	1,361,567	195,026	1,361	892	438	—	—
New Mexico	655,528	560,039	89,664	4,425	364	972	—	64
Arizona	1,557,246	1,382,862	158,868	4,734	8,535	2,228	1	18
Utah	616,797	550,048	58,658	5,996	1,950	137	—	8
Nevada	503,141	436,050	65,971	600	370	149	—	1
Mountain	**6,026,016**	**5,238,448**	**739,822**	**26,705**	**16,329**	**4,345**	**1**	**366**
Washington	2,089,991	1,855,916	224,171	6,066	3,614	178	1	45
Oregon	1,232,992	1,074,068	155,264	2,459	1,131	53	—	17
California	11,553,710	10,106,174	1,386,072	34,883	25,269	368	3	941
Pacific	**14,876,693**	**13,036,158**	**1,765,507**	**43,408**	**30,014**	**599**	**4**	**1,003**
Alaska	217,734	185,960	29,752	489	771	760	—	2
Hawaii	354,887	306,375	46,333	661	1,518	—	—	—
Alaska & Hawaii	**572,621**	**492,335**	**76,085**	**1,150**	**2,289**	**760**	**—**	**2**

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TABLE 51A

ULTIMATE CUSTOMERS
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1989p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**83,034,837**	**73,182,186**	**9,181,854**	**376,809**	**137,588**	**155,920**	**22**	**458**
Maine	605,087	538,089	63,206	2,653	1,045	94	—	—
New Hampshire	484,950	420,142	62,148	1,592	641	427	—	—
Vermont	226,365	196,877	28,603	131	275	479	—	—
Massachusetts	2,286,164	2,024,854	245,683	8,023	5,071	2,532	1	—
Rhode Island	429,234	381,747	43,912	2,667	877	31	—	—
Connecticut	1,370,405	1,244,294	117,451	4,599	4,060	—	1	—
New England	**5,402,205**	**4,806,003**	**561,003**	**19,665**	**11,969**	**3,563**	**2**	**—**
New York	6,926,795	6,094,805	796,568	9,736	9,734	15,946	4	2
New Jersey	3,224,634	2,827,946	375,760	12,025	8,901	—	1	1
Pennsylvania	4,930,415	4,388,338	506,054	29,269	6,337	412	4	1
Middle Atlantic	**15,081,844**	**13,311,089**	**1,678,382**	**51,030**	**24,972**	**16,358**	**9**	**4**
Ohio	4,116,252	3,684,972	388,048	28,081	5,816	9,319	2	14
Indiana	1,854,352	1,641,120	197,726	11,557	3,044	902	1	2
Illinois	4,395,779	3,970,144	405,845	5,992	2,636	11,156	2	4
Michigan	3,586,975	3,229,974	339,681	12,751	3,011	1,555	—	3
Wisconsin	1,846,352	1,646,085	192,582	2,799	4,240	618	—	28
East North Central	**15,799,710**	**14,172,295**	**1,523,882**	**61,180**	**18,747**	**23,550**	**5**	**51**
Minnesota	1,174,350	1,036,593	126,024	6,499	2,178	3,054	—	2
Iowa	947,966	813,111	126,421	2,381	904	5,147	—	2
Missouri	1,588,938	1,395,672	179,555	8,004	2,215	3,450	—	42
North Dakota	197,623	165,704	29,327	1,677	399	514	—	2
South Dakota	175,706	147,830	26,507	470	387	511	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	789,576	691,523	89,333	7,465	1,050	204	—	1
West North Central	**4,874,159**	**4,250,433**	**577,167**	**26,496**	**7,133**	**12,880**	**—**	**50**
Delaware	225,234	202,245	22,371	395	222	—	—	1
Maryland	1,754,977	1,576,967	166,988	10,206	813	—	2	1
District of Columbia	217,097	190,405	26,488	168	35	—	1	—
Virginia	2,177,826	1,933,299	214,969	3,447	1,958	24,153	—	—
West Virginia	845,569	740,307	93,382	10,489	1,122	269	—	—
North Carolina	2,148,275	1,836,414	291,770	10,686	7,794	1,595	—	16
South Carolina	975,747	830,760	137,291	3,548	2,460	1,673	—	15
Georgia	1,655,370	1,449,977	190,112	12,380	2,207	693	1	—
Florida	5,011,484	4,439,922	532,313	21,132	5,715	12,398	1	3
South Atlantic	**15,011,579**	**13,200,296**	**1,675,684**	**72,451**	**22,326**	**40,781**	**5**	**36**
Kentucky	966,521	832,779	116,788	4,576	4,602	7,775	—	1
Tennessee	38,227	34,062	3,850	159	120	36	—	—
Alabama	1,121,739	974,622	141,265	5,200	651	—	—	1
Mississippi	521,777	443,846	70,724	4,124	527	2,555	—	1
East South Central	**2,648,264**	**2,285,309**	**332,627**	**14,059**	**5,900**	**10,366**	**—**	**3**
Arkansas	707,368	607,950	78,425	18,783	522	1,688	—	—
Louisiana	1,385,718	1,216,586	144,209	12,642	2,281	9,998	—	2
Oklahoma	1,047,550	907,630	116,355	13,158	1,073	9,334	—	—
Texas	5,275,948	4,583,436	609,646	51,922	5,952	24,991	—	1
West South Central	**8,416,584**	**7,315,602**	**948,635**	**96,505**	**9,828**	**46,011**	**—**	**3**
Montana	299,629	249,276	44,518	2,623	2,880	124	—	208
Idaho	391,366	328,568	60,555	1,701	487	51	—	4
Wyoming	153,233	127,847	22,562	2,589	173	61	—	1
Colorado	1,008,643	894,195	113,592	190	493	173	—	—
New Mexico	470,994	411,340	54,154	4,267	295	901	—	37
Arizona	906,126	800,857	99,813	3,817	777	862	—	—
Utah	482,149	432,513	41,570	6,241	1,776	47	—	2
Nevada	511,924	445,281	65,898	628	96	21	—	—
Mountain	**4,224,064**	**3,689,877**	**502,662**	**22,056**	**6,977**	**2,240**	**—**	**252**
Washington	994,581	884,336	104,267	4,470	1,475	1	—	32
Oregon	988,538	860,073	125,295	2,164	1,002	1	—	3
California	9,215,661	8,081,711	1,102,600	5,663	25,628	34	1	24
Pacific	**11,198,780**	**9,826,120**	**1,332,162**	**12,297**	**28,105**	**36**	**1**	**59**
Alaska	15,367	12,815	1,949	380	88	135	—	—
Hawaii	362,281	312,347	47,701	690	1,543	—	—	—
Alaska & Hawaii	**377,648**	**325,162**	**49,650**	**1,070**	**1,631**	**135**	**—**	**—**

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TABLE 51B

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
AT DECEMBER 31, 1988r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**81,673,876**	**72,036,602**	**8,985,299**	**367,854**	**131,711**	**151,898**	**22**	**490**
Maine	592,747	527,595	61,323	2,699	1,043	87	–	–
New Hampshire	477,436	414,055	59,990	1,517	1,434	440	–	–
Vermont	221,504	193,051	27,566	129	270	488	–	–
Massachusetts	2,233,907	1,980,470	238,068	8,020	4,936	2,412	1	–
Rhode Island	421,275	375,588	42,149	2,662	847	29	–	–
Connecticut	1,356,369	1,233,379	114,356	4,593	4,040	–	1	–
New England	**5,303,238**	**4,724,138**	**543,452**	**19,620**	**12,570**	**3,456**	**2**	**–**
New York	6,849,070	6,033,758	782,208	7,879	9,686	15,533	4	2
New Jersey	3,186,164	2,798,288	367,409	12,146	8,319	–	1	1
Pennsylvania	4,868,589	4,337,579	495,203	28,984	6,397	421	4	1
Middle Atlantic	**14,903,823**	**13,169,625**	**1,644,820**	**49,009**	**24,402**	**15,954**	**9**	**4**
Ohio	4,071,430	3,648,242	380,382	27,612	5,792	9,384	2	16
Indiana	1,829,242	1,620,192	194,062	11,149	2,934	902	1	2
Illinois	4,344,065	3,926,565	398,101	5,799	2,617	10,978	2	3
Michigan	3,538,689	3,190,312	331,462	12,418	2,948	1,546	–	3
Wisconsin	1,816,550	1,621,369	188,024	2,758	3,744	628	–	27
East North Central	**15,599,976**	**14,006,680**	**1,492,031**	**59,736**	**18,035**	**23,438**	**5**	**51**
Minnesota	1,157,388	1,021,922	124,097	6,242	2,128	2,997	–	2
Iowa	940,884	807,436	125,083	2,437	885	5,041	–	2
Missouri	1,569,280	1,379,051	176,653	7,852	2,182	3,503	–	39
North Dakota	197,124	165,656	28,853	1,652	396	565	–	2
South Dakota	173,856	146,428	26,077	448	388	514	–	1
Nebraska	–	–	–	–	–	–	–	–
Kansas	779,552	683,117	87,665	7,529	1,035	205	–	1
West North Central	**4,818,084**	**4,203,610**	**568,428**	**26,160**	**7,014**	**12,825**	**–**	**47**
Delaware	218,668	196,449	21,594	411	213	–	–	1
Maryland	1,715,122	1,543,391	165,426	5,500	802	–	2	1
District of Columbia	215,180	188,760	26,216	167	36	–	1	–
Virginia	2,125,459	1,888,610	207,896	3,423	1,896	23,634	–	–
West Virginia	836,535	733,211	91,477	10,451	1,126	265	–	5
North Carolina	2,105,953	1,803,773	282,611	10,640	7,345	1,569	–	15
South Carolina	957,600	817,240	132,778	3,501	2,418	1,648	–	15
Georgia	1,624,179	1,422,659	186,282	12,422	2,126	689	1	–
Florida	4,850,127	4,296,042	515,242	21,803	5,391	11,645	1	3
South Atlantic	**14,648,823**	**12,890,135**	**1,629,522**	**68,318**	**21,353**	**39,450**	**5**	**40**
Kentucky	954,130	823,134	114,446	4,366	4,515	7,668	–	1
Tennessee	37,715	33,533	3,888	138	120	36	–	–
Alabama	1,108,302	964,581	137,955	5,120	645	–	–	1
Mississippi	514,323	437,887	69,411	3,968	524	2,532	–	1
East South Central	**2,614,470**	**2,259,135**	**325,700**	**13,592**	**5,804**	**10,236**	**–**	**3**
Arkansas	699,807	601,959	77,304	18,069	524	1,951	–	–
Louisiana	1,383,574	1,214,475	144,255	12,907	2,296	9,639	–	2
Oklahoma	1,040,856	902,291	115,765	13,032	1,094	8,674	–	–
Texas	5,211,490	4,527,831	604,352	52,118	3,299	23,889	–	1
West South Central	**8,335,727**	**7,246,556**	**941,676**	**96,126**	**7,213**	**44,153**	**–**	**3**
Montana	322,928	268,739	46,085	4,819	2,916	126	–	243
Idaho	384,398	323,285	58,962	1,625	478	47	–	1
Wyoming	153,551	128,392	22,620	2,309	167	61	–	2
Colorado	998,942	885,863	112,235	174	481	189	–	–
New Mexico	462,946	404,094	53,486	4,203	255	867	–	41
Arizona	886,410	782,983	97,998	3,844	706	878	–	1
Utah	474,672	426,509	40,523	5,866	1,724	47	–	3
Nevada	475,449	413,526	61,235	574	96	18	–	–
Mountain	**4,159,296**	**3,633,391**	**493,144**	**23,414**	**6,823**	**2,233**	**–**	**291**
Washington	966,092	859,876	101,151	3,594	1,444	1	–	26
Oregon	968,996	843,213	122,918	1,873	988	1	–	3
California	8,985,123	7,881,056	1,074,180	5,373	24,458	33	1	22
Pacific	**10,920,211**	**9,584,145**	**1,298,249**	**10,840**	**26,890**	**35**	**1**	**51**
Alaska	15,341	12,812	1,944	378	89	118	–	–
Hawaii	354,887	306,375	46,333	661	1,518	–	–	–
Alaska & Hawaii	**370,228**	**319,187**	**48,277**	**1,039**	**1,607**	**118**	**–**	**–**

r Revised.

TABLE 52A

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1989p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**107,476,054**	**94,801,772**	**11,804,910**	**502,685**
Maine	627,657	558,158	65,556	2,751
New Hampshire	554,171	481,295	69,981	1,597
Vermont	290,157	253,584	34,522	1,236
Massachusetts	2,587,905	2,294,140	273,819	12,066
Rhode Island	428,970	382,049	43,337	2,689
Connecticut	1,427,441	1,295,001	123,588	4,731
New England	**5,916,301**	**5,264,227**	**610,803**	**25,070**
New York	7,049,289	6,204,820	806,731	11,071
New Jersey	3,285,491	2,886,269	378,172	12,456
Pennsylvania	5,141,253	4,585,284	518,176	29,895
Middle Atlantic	**15,476,033**	**13,676,373**	**1,703,079**	**53,422**
Ohio	4,637,030	4,155,748	434,177	30,183
Indiana	2,399,795	2,145,018	235,131	14,326
Illinois	4,753,767	4,299,554	432,332	6,743
Michigan	4,014,630	3,619,937	374,977	13,917
Wisconsin	2,201,838	1,955,369	236,014	5,073
East North Central	**18,007,060**	**16,175,626**	**1,712,631**	**70,242**
Minnesota	1,920,166	1,721,746	181,456	8,462
Iowa	1,294,262	1,127,241	154,981	4,278
Missouri	2,353,711	2,086,206	247,318	10,225
North Dakota	308,786	260,976	44,135	1,925
South Dakota	326,117	280,983	41,562	1,213
Nebraska	780,585	645,220	126,177	3,382
Kansas	1,178,307	1,009,637	155,787	9,718
West North Central	**8,161,934**	**7,132,009**	**951,416**	**39,203**
Delaware	306,035	275,121	29,703	697
Maryland	1,883,829	1,695,101	176,770	11,026
District of Columbia	215,772	189,227	26,343	166
Virginia	2,556,171	2,274,961	249,214	4,772
West Virginia	848,587	743,383	93,351	10,470
North Carolina	3,145,468	2,743,863	374,850	14,083
South Carolina	1,597,559	1,390,751	196,399	4,397
Georgia	2,905,910	2,591,033	285,388	19,602
Florida	6,278,895	5,556,090	678,336	24,640
South Atlantic	**19,738,226**	**17,459,530**	**2,110,354**	**89,853**
Kentucky	1,663,569	1,466,330	176,389	7,592
Tennessee	2,235,459	1,965,329	248,548	18,821
Alabama	1,853,518	1,623,487	217,257	9,063
Mississippi	1,122,208	974,850	137,171	5,337
East South Central	**6,874,754**	**6,029,996**	**779,365**	**40,813**
Arkansas	1,141,039	997,060	118,572	20,688
Louisiana	1,800,773	1,586,441	186,785	14,852
Oklahoma	1,540,120	1,330,708	182,931	15,263
Texas	7,144,574	6,212,793	841,704	58,162
West South Central	**11,626,506**	**10,127,002**	**1,329,992**	**108,965**
Montana	408,736	341,502	60,170	3,608
Idaho	466,029	392,157	70,053	3,224
Wyoming	242,040	197,594	40,815	2,994
Colorado	1,569,063	1,369,398	196,903	1,299
New Mexico	660,067	564,429	89,737	4,478
Arizona	1,567,880	1,391,567	160,743	4,718
Utah	620,843	552,563	59,419	6,750
Nevada	522,948	453,201	68,592	633
Mountain	**6,057,606**	**5,262,411**	**746,432**	**27,704**
Washington	2,120,264	1,881,785	[illegible]8,050	7,256
Oregon	1,249,265	1,085,238	[illegible],140	2,672
California	11,669,011	10,210,019	1,395,445	36,303
Pacific	**15,038,540**	**13,177,042**	**1,783,635**	**46,231**
Alaska	220,460	188,138	30,181	509
Hawaii	358,634	309,418	47,022	673
Alaska & Hawaii	**579,094**	**497,556**	**77,203**	**1,182**

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TABLE 52B

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1988r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**105,689,337**	**93,290,722**	**11,546,501**	**494,254**
Maine	612,720	545,508	63,498	2,533
New Hampshire	539,500	469,548	66,479	1,539
Vermont	282,804	247,683	33,279	1,015
Massachusetts	2,535,987	2,250,334	265,106	12,944
Rhode Island	420,481	375,118	41,808	2,683
Connecticut	1,405,232	1,277,078	119,400	4,739
New England	**5,796,724**	**5,165,269**	**589,570**	**25,453**
New York	6,969,504	6,144,019	789,747	10,252
New Jersey	3,239,858	2,848,354	370,928	12,522
Pennsylvania	5,077,509	4,533,203	506,707	29,652
Middle Atlantic	**15,286,871**	**13,525,576**	**1,667,382**	**52,426**
Ohio	4,586,775	4,113,362	426,742	29,712
Indiana	2,368,346	2,118,302	230,831	13,983
Illinois	4,705,102	4,258,633	425,017	6,526
Michigan	3,961,189	3,575,206	366,541	13,706
Wisconsin	2,174,467	1,930,979	233,396	4,962
East North Central	**17,795,879**	**15,996,482**	**1,682,527**	**68,889**
Minnesota	1,894,261	1,698,523	179,258	8,110
Iowa	1,286,206	1,120,734	153,644	4,252
Missouri	2,320,870	2,058,868	240,949	11,390
North Dakota	308,297	260,874	42,808	2,824
South Dakota	323,561	278,992	41,042	1,216
Nebraska	773,741	640,157	124,449	3,310
Kansas	1,164,229	995,897	155,340	9,792
West North Central	**8,071,165**	**7,054,045**	**937,490**	**40,894**
Delaware	297,072	267,443	28,421	700
Maryland	1,838,280	1,656,578	175,017	5,769
District of Columbia	213,650	187,428	26,018	167
Virginia	2,486,808	2,215,579	240,113	4,699
West Virginia	840,276	736,961	91,493	10,430
North Carolina	3,077,793	2,688,452	363,014	13,964
South Carolina	1,562,785	1,362,304	190,249	4,321
Georgia	2,826,720	2,524,756	273,049	19,493
Florida	6,083,773	5,383,071	657,073	24,828
South Atlantic	**19,227,157**	**17,022,572**	**2,044,447**	**84,371**
Kentucky	1,640,597	1,449,520	170,558	7,506
Tennessee	2,202,337	1,945,485	235,787	18,351
Alabama	1,825,339	1,603,948	208,968	8,811
Mississippi	1,106,266	963,724	132,565	5,225
East South Central	**6,774,539**	**5,962,677**	**747,878**	**39,893**
Arkansas	1,124,455	982,454	116,765	20,616
Louisiana	1,770,422	1,557,592	185,315	15,235
Oklahoma	1,533,350	1,324,874	181,965	15,467
Texas	7,067,582	6,144,004	835,273	58,304
West South Central	**11,459,809**	**10,008,924**	**1,319,318**	**109,622**
Montana	416,571	348,105	60,662	4,118
Idaho	460,138	387,864	68,610	3,066
Wyoming	241,806	197,740	40,828	2,608
Colorado	1,554,442	1,357,194	194,539	1,357
New Mexico	649,536	554,711	89,055	4,412
Arizona	1,529,078	1,356,325	157,218	4,689
Utah	612,792	545,860	58,282	6,558
Nevada	488,068	423,056	63,894	598
Mountain	**5,952,431**	**5,170,855**	**733,088**	**27,406**
Washington	2,072,884	1,838,196	224,869	5,937
Oregon	1,241,629	1,078,090	159,916	2,382
California	11,405,618	9,979,055	1,364,550	35,828
Pacific	**14,720,131**	**12,895,341**	**1,749,335**	**44,147**
Alaska	218,084	186,234	29,828	489
Hawaii	350,547	302,747	45,638	664
Alaska & Hawaii	**568,631**	**488,981**	**75,466**	**1,153**

r Revised.

TABLE 53A

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1989p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**82,323,798**	**72,568,094**	**9,088,225**	**378,199**
Maine	600,139	533,981	62,405	2,615
New Hampshire	484,023	419,815	61,389	1,547
Vermont	224,503	195,465	28,148	131
Massachusetts	2,268,543	2,010,232	242,644	8,039
Rhode Island	425,143	378,636	42,947	2,667
Connecticut	1,364,080	1,239,300	116,116	4,600
New England	**5,366,431**	**4,777,429**	**553,649**	**19,599**
New York	6,891,577	6,065,986	790,568	8,679
New Jersey	3,209,122	2,818,251	370,184	12,119
Pennsylvania	4,899,085	4,361,717	501,424	29,149
Middle Atlantic	**14,999,784**	**13,245,954**	**1,662,176**	**49,947**
Ohio	4,089,219	3,662,088	384,042	27,901
Indiana	1,840,329	1,628,999	196,067	11,359
Illinois	4,369,591	3,948,022	401,956	5,902
Michigan	3,562,081	3,209,051	335,904	12,585
Wisconsin	1,826,726	1,629,282	190,127	2,759
East North Central	**15,687,946**	**14,077,442**	**1,508,096**	**60,506**
Minnesota	1,160,602	1,024,217	124,852	6,357
Iowa	944,290	809,977	125,793	2,435
Missouri	1,577,255	1,385,536	178,078	7,895
North Dakota	196,758	165,003	29,164	1,669
South Dakota	174,630	146,793	26,483	454
Nebraska	—	—	—	—
Kansas	783,664	686,466	88,447	7,502
West North Central	**4,837,199**	**4,217,992**	**572,817**	**26,312**
Delaware	222,608	199,954	22,028	405
Maryland	1,735,871	1,560,715	163,677	10,670
District of Columbia	215,772	189,227	26,343	166
Virginia	2,150,059	1,909,106	211,734	3,420
West Virginia	840,406	736,159	92,422	10,445
North Carolina	2,134,359	1,826,691	287,818	10,648
South Carolina	969,983	826,555	135,758	3,537
Georgia	1,635,256	1,432,151	187,862	12,385
Florida	4,917,790	4,353,892	524,874	21,431
South Atlantic	**14,822,104**	**13,034,450**	**1,652,516**	**73,107**
Kentucky	960,171	828,156	115,304	4,434
Tennessee	37,934	33,781	3,854	149
Alabama	1,113,837	968,397	139,648	5,141
Mississippi	517,301	440,454	69,743	4,020
East South Central	**2,629,243**	**2,270,788**	**328,549**	**13,744**
Arkansas	707,070	606,592	78,048	19,934
Louisiana	1,384,703	1,215,722	144,181	12,659
Oklahoma	1,043,449	904,274	116,111	13,079
Texas	5,241,849	4,554,429	606,937	51,993
West South Central	**8,377,071**	**7,281,017**	**945,277**	**97,665**
Montana	299,036	248,411	44,046	3,547
Idaho	388,982	325,729	59,787	2,930
Wyoming	154,230	128,532	22,941	2,512
Colorado	1,003,509	889,641	113,022	181
New Mexico	464,805	405,714	53,671	4,236
Arizona	890,533	786,300	98,758	3,851
Utah	478,392	428,784	41,210	6,619
Nevada	494,148	429,721	63,707	605
Mountain	**4,173,635**	**3,642,832**	**497,142**	**24,481**
Washington	983,074	872,199	105,206	4,172
Oregon	982,732	852,166	127,476	2,089
California	9,090,578	7,973,592	1,086,350	5,524
Pacific	**11,056,384**	**9,697,957**	**1,319,032**	**11,785**
Alaska	15,367	12,815	1,949	380
Hawaii	358,634	309,418	47,022	673
Alaska & Hawaii	**374,001**	**322,233**	**48,971**	**1,053**

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TABLE 53B

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1988r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**80,947,345**	**71,407,852**	**8,890,121**	**368,273**
Maine	585,953	521,971	60,452	2,402
New Hampshire	471,945	410,020	58,530	1,489
Vermont	218,686	190,839	26,963	131
Massachusetts	2,219,718	1,968,633	235,695	8,060
Rhode Island	416,779	371,817	41,428	2,664
Connecticut	1,344,274	1,223,318	112,389	4,608
New England	**5,257,355**	**4,686,598**	**535,457**	**19,354**
New York	6,812,308	6,005,651	773,634	7,858
New Jersey	3,163,971	2,780,763	362,993	12,186
Pennsylvania	4,838,218	4,312,303	490,161	28,908
Middle Atlantic	**14,814,497**	**13,098,717**	**1,626,788**	**48,952**
Ohio	4,044,800	3,625,059	377,108	27,394
Indiana	1,815,682	1,608,618	192,198	11,069
Illinois	4,323,355	3,909,295	394,852	5,698
Michigan	3,513,688	3,169,107	327,724	12,361
Wisconsin	1,802,131	1,607,466	187,614	2,702
East North Central	**15,499,656**	**13,919,545**	**1,479,496**	**59,224**
Minnesota	1,146,536	1,011,885	123,424	6,077
Iowa	938,199	805,145	124,711	2,417
Missouri	1,556,085	1,367,846	174,722	7,888
North Dakota	196,613	165,136	28,867	1,644
South Dakota	173,435	145,918	26,170	439
Nebraska	—	—	—	—
Kansas	771,767	676,878	86,085	7,569
West North Central	**4,782,635**	**4,172,808**	**563,979**	**26,034**
Delaware	215,381	193,776	20,987	408
Maryland	1,694,971	1,526,251	162,507	5,413
District of Columbia	213,650	187,428	26,018	167
Virginia	2,093,660	1,861,383	203,897	3,400
West Virginia	832,146	729,786	90,566	10,405
North Carolina	2,083,918	1,786,194	278,418	10,505
South Carolina	949,632	811,083	131,031	3,480
Georgia	1,594,449	1,398,257	181,217	12,290
Florida	4,749,339	4,205,490	505,591	21,637
South Atlantic	**14,427,146**	**12,699,648**	**1,600,232**	**67,705**
Kentucky	948,617	819,342	112,842	4,392
Tennessee	37,377	33,297	3,794	136
Alabama	1,099,348	957,233	136,503	4,975
Mississippi	512,459	436,566	68,902	3,931
East South Central	**2,597,801**	**2,246,438**	**322,041**	**13,434**
Arkansas	695,596	596,862	76,424	19,866
Louisiana	1,383,865	1,214,972	144,039	13,079
Oklahoma	1,039,137	900,738	115,726	12,971
Texas	5,181,679	4,500,851	601,908	52,078
West South Central	**8,300,277**	**7,213,423**	**938,097**	**97,994**
Montana	307,061	255,224	44,515	4,059
Idaho	383,806	322,046	58,447	2,775
Wyoming	154,505	128,973	23,170	2,122
Colorado	995,222	882,630	111,729	171
New Mexico	456,954	398,766	52,877	4,190
Arizona	868,517	766,299	96,816	3,785
Utah	470,667	422,321	40,147	6,428
Nevada	460,375	400,532	59,158	571
Mountain	**4,097,107**	**3,576,791**	**486,859**	**24,101**
Washington	956,918	849,713	102,250	3,450
Oregon	978,327	847,825	127,670	1,799
California	8,869,738	7,780,787	1,059,670	5,184
Pacific	**10,804,983**	**9,478,325**	**1,289,590**	**10,433**
Alaska	15,341	12,812	1,944	378
Hawaii	350,547	302,747	45,638	664
Alaska & Hawaii	**365,888**	**315,559**	**47,582**	**1,042**

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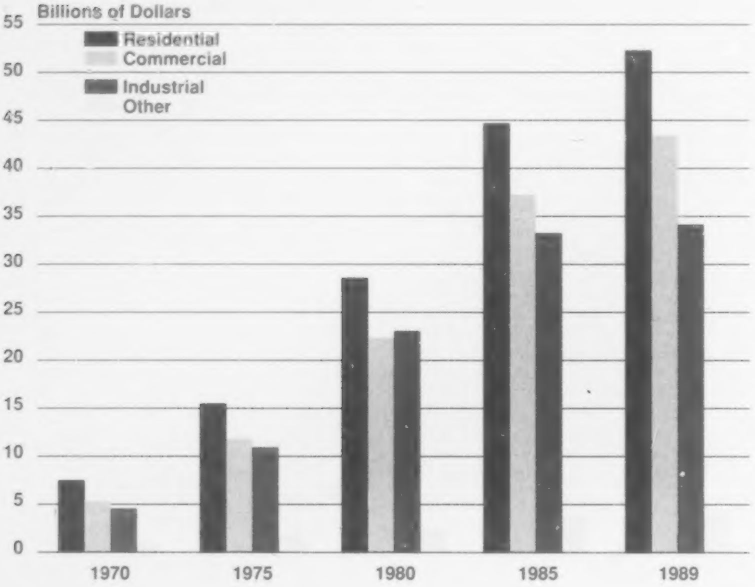
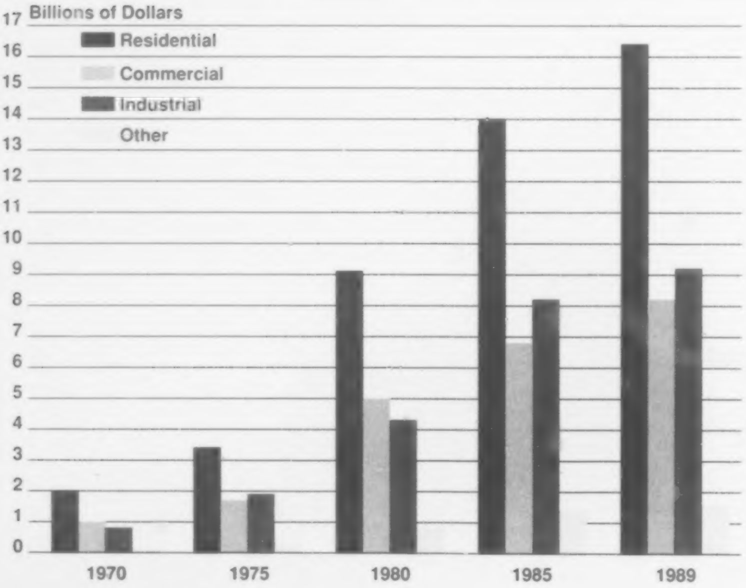
SECTION VIII
REVENUES

CHART VIII-A
REVENUES FROM ULTIMATE CUSTOMERS

INVESTOR-OWNED UTILITIES



NON-INVESTOR-OWNED UTILITIES



Based on Tables 56 and 57, on page 65.

TABLE 56

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenue from Sales †	Exports to Canada and Mexico	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1989p	**$169,393,806**	**$276,332**	**$169,117,474**	**$68,614,491**	**$51,591,644**	**$43,362,526**	**$1,541,708**	**$3,509,674**	**$329,030**	**$168,399**
1988r	162,449,065	61,207	162,387,858	66,402,539	49,141,145	41,561,302	1,503,799	3,308,314	296,215	174,544
1987	155,713,924	33,407	155,700,236	63,049,059	46,745,107	40,630,608	1,509,246	3,273,260	301,635	191,321
1986	152,480,811	13,688	152,467,123	60,910,603	45,410,286	40,906,054	1,498,431	3,214,164	311,971	215,614
1985	149,187,568	25,216	149,162,352	58,591,751	44,060,554	41,367,347	1,476,092	3,163,473	313,165	189,470
1984	143,114,300	21,796	143,092,504	56,116,141	41,253,720	40,795,789	1,375,931	3,044,623	302,725	203,574
1983	129,596,675	7,874	129,588,801	51,226,246	37,103,377	36,611,630	1,324,955	2,864,037	296,766	161,790
1982	121,597,243	13,012	121,584,231	47,188,127	34,150,840	35,881,745	1,254,430	2,633,749	291,751	183,589
1981	111,028,011	26,838	111,001,173	42,824,457	31,325,322	33,030,093	1,168,691	2,247,307	238,554	166,749
1980	95,505,802	43,421	95,462,381	37,580,892	27,369,963	27,316,770	1,041,008	1,811,065	207,683	135,000
1979	79,649,846	9,609	79,640,237	30,798,693	22,264,356	23,825,487	918,157	1,517,333	188,628	127,583
1978	69,865,806	12,862	69,852,944	27,381,419	19,714,364	20,280,391	849,677	1,350,439	170,123	106,531
1977	62,629,713	19,684	62,610,029	24,687,500	18,021,548	17,629,321	776,771	1,245,155	145,680	104,054
1976	53,480,659	17,795	53,462,864	21,149,590	15,236,104	14,999,522	724,436	1,112,247	163,840	77,125
1975	46,864,685	11,229	46,853,456	18,803,156	13,486,624	12,707,490	659,332	975,799	159,160	61,895
1974	39,133,322	6,517	39,126,805	15,702,853	11,196,960	10,673,464	573,164	780,010	146,112	54,242
1973	31,668,281	5,422	31,662,859	13,194,773	9,147,188	8,073,636	491,831	620,991	91,903	42,537
1972	27,927,681	6,611	27,921,070	11,729,833	8,041,052	6,983,891	449,831	593,267	85,300	37,896
1971	24,735,122	9,963	24,725,159	10,483,526	7,071,971	6,133,964	411,534	512,772	77,862	33,530
1970	22,076,885	11,023	22,065,862	9,415,707	6,290,225	5,429,852	377,791	453,104	69,169	30,014
1969	20,144,225	4,876	20,139,349	8,532,729	5,704,764	5,044,857	350,563	417,571	62,981	25,884

Note: Total may not equal sum of components due to independent rounding.
† Excludes other electric revenues.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 57

REVENUES

INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenues	Other Revenues†	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1989p	**$140,883,099**	**$7,205,572**	**$133,677,527**	**$52,199,755**	**$43,382,561**	**$34,120,006**	**$1,210,396**	**$2,498,112**	**$158,297**	**$108,402**
1988r	134,555,680	6,315,324	128,240,356	50,472,485	41,237,149	32,739,382	1,181,146	2,343,706	150,151	116,336
1987	129,437,054	6,124,194	123,312,860	47,962,072	39,437,160	32,110,727	1,198,413	2,320,698	147,336	136,454
1986	127,552,448r	6,477,978r	121,074,470	46,241,943	38,382,364	32,618,323	1,177,956	2,334,092	156,846	162,947
1985	125,547,432	6,711,160	118,836,272	44,651,261	37,241,520	33,204,216	1,159,701	2,285,783	157,728	136,064
1984	120,090,160	6,752,083	113,338,077	42,474,833	34,720,332	32,605,010	1,119,279	2,144,129	142,578	131,916
1983	109,446,384	6,581,164	102,865,220	39,067,481	31,336,661	29,275,314	1,057,872	1,899,057	126,300	102,536
1982	101,692,973	4,595,135	97,097,838	36,138,384	29,603,969	28,322,848	1,022,473	1,775,494	130,340	104,329
1981	94,266,325	5,497,327	88,768,998	32,622,129	26,370,929	26,986,678	933,861	1,641,632	120,124	93,645
1980	80,635,823	4,460,469	76,175,354	28,492,402	22,351,012	22,970,668	819,762	1,362,136	111,552	67,822
1979	68,151,992	4,274,055	63,877,937	23,613,621	18,463,690	19,801,718	716,209	1,137,987	80,002	64,710
1978	61,298,846	3,683,472	57,615,374	21,623,578	16,784,764	17,379,313	682,895	1,016,671	74,772	53,381
1977	55,141,656	3,364,784	51,776,872	19,541,802	15,404,917	15,092,313	632,154	964,452	90,263	50,971
1976	47,079,734	2,599,312	44,480,422	16,920,314	13,137,482	12,688,950	612,674	935,116	150,173	35,713
1975	41,855,398	2,285,281	39,570,117	15,434,811	11,766,583	10,785,231	558,554	841,853	157,539	25,546
1974	34,970,201	1,784,436	33,185,765	12,881,369	9,737,585	9,243,172	485,472	670,971	144,837	22,359
1973	27,525,926	1,208,947	26,316,979	10,590,178	7,807,644	6,875,953	412,921	522,826	90,753	16,704
1972	24,132,546	1,011,942	23,120,604	9,359,949	6,832,630	5,950,367	378,413	502,910	84,144	12,191
1971	21,230,373	835,581	20,394,792	8,308,330	6,016,096	5,199,601	347,972	435,949	76,701	10,143
1970	18,830,214	722,994	18,107,220	7,424,224	5,314,447	4,591,093	319,373	381,405	68,030	8,648
1969	17,163,515	647,843	16,515,672	6,722,985	4,804,558	4,274,968	296,028	347,078	61,855	8,200

Note: Total may not equal sum of components due to independent rounding.
† Includes revenue from sales to non-investor-owned electric utilities, from exports and other electric revenues.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 58

REVENUES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE

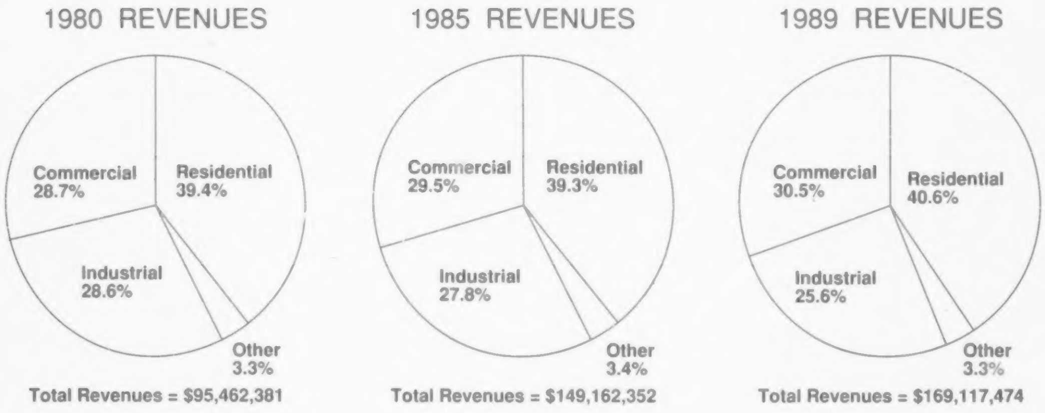
Year	Residential	Commercial	Industrial	Street & Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1989p	**40.6%**	**30.5%**	**25.6%**	**0.9%**	**2.1%**	**0.2%**	**0.1%**
1988r	40.9	30.3	25.6	0.9	2.0	0.2	0.1
1987	40.5	30.0	26.1	1.0	2.1	0.2	0.1
1986	40.0	29.8	26.8	1.0	2.1	0.2	0.1
1985	39.3	29.5	27.8	1.0	2.1	0.2	0.1
1984	39.3	28.8	28.5	1.0	2.1	0.2	0.1
1983	39.5	28.6	28.3	1.0	2.2	0.3	0.1
1982	38.8	28.1	29.5	1.0	2.2	0.2	0.2
1981	38.6	28.2	29.7	1.1	2.0	0.2	0.2
1980	39.4	28.7	28.6	1.1	1.9	0.2	0.1
1979	38.7	28.0	29.9	1.1	1.9	0.2	0.2
1978	39.2	28.2	29.0	1.2	1.9	0.3	0.2
1977	39.4	28.8	28.2	1.2	2.0	0.2	0.2
1976	39.6	28.5	28.0	1.4	2.1	0.3	0.1
1975	40.1	28.8	27.1	1.4	2.1	0.4	0.1
1974	40.1	28.6	27.3	1.5	2.0	0.4	0.1
1973	41.6	28.9	25.5	1.6	2.0	0.3	0.1
1972	42.0	28.8	25.0	1.6	2.1	0.3	0.2
1971	42.4	28.6	24.8	1.7	2.1	0.3	0.1
1970	42.7	28.5	24.6	1.7	2.1	0.3	0.1
1969	42.4	28.3	25.0	1.8	2.1	0.3	0.1

Based on revenue data in Table 56. p Preliminary. r Revised.

CHART VIII-B

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS



1980 REVENUES

Total Revenues = $95,462,381

1985 REVENUES

Total Revenues = $149,162,352

1989 REVENUES

Total Revenues = $169,117,474

Based on Table 58, as shown above.

TABLE 59A

REVENUES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1989p—THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$169,117,474**	**$68,614,491**	**$51,591,644**	**$43,362,526**	**$1,541,708**	**$3,509,674**	**$329,030**	**$168,399**
Maine	802,121	341,808	194,530	247,971	9,915	7,803	—	94
New Hampshire	746,708	338,542	176,870	218,690	6,953	5,654	—	—
Vermont	380,876	162,159	122,029	89,603	2,983	4,075	—	26
Massachusetts	3,794,339	1,447,515	1,478,248	753,598	56,032	50,541	8,406	—
Rhode Island	525,219	213,139	192,063	105,240	5,531	9,247	—	—
Connecticut	2,398,001	1,005,754	897,655	449,411	32,957	2,457	9,045	721
New England	**8,647,264**	**3,508,917**	**3,061,396**	**1,864,513**	**114,370**	**79,776**	**17,451**	**842**
New York	11,354,464	4,124,398	4,656,498	1,671,210	142,921	587,588	169,696	2,153
New Jersey	5,617,681	2,089,070	2,311,727	1,139,595	75,009	—	439	1,842
Pennsylvania	8,351,884	3,370,807	2,200,436	2,632,434	82,803	8,946	50,883	5,576
Middle Atlantic	**25,324,030**	**9,584,275**	**9,168,661**	**5,443,239**	**300,733**	**596,534**	**221,018**	**9,571**
Ohio	8,091,285	3,019,927	2,149,790	2,656,242	61,886	198,735	4,169	536
Indiana	3,827,998	1,538,722	931,385	1,307,313	33,418	13,300	1,138	2,720
Illinois	8,147,828	3,197,703	2,328,424	2,115,192	49,751	428,847	27,750	159
Michigan	5,583,781	1,908,613	1,575,040	1,991,931	58,444	46,975	—	2,779
Wisconsin	2,609,654	1,072,515	737,714	753,453	28,381	12,749	—	4,842
East North Central	**28,260,546**	**10,737,480**	**7,722,354**	**8,824,132**	**231,880**	**700,607**	**33,058**	**11,036**
Minnesota	2,427,590	996,601	453,125	936,039	21,473	20,144	—	207
Iowa	1,691,580	787,371	402,605	453,647	18,993	28,926	—	38
Missouri	3,305,200	1,516,820	1,158,516	569,491	28,601	30,698	275	798
North Dakota	396,462	186,221	105,255	87,909	6,974	9,996	—	106
South Dakota	379,701	198,545	114,276	56,446	4,914	5,519	—	1
Nebraska	958,391	411,767	331,991	178,771	13,939	21,283	—	639
Kansas	1,659,943	687,016	583,374	363,077	17,175	9,257	—	45
West North Central	**10,818,867**	**4,784,341**	**3,149,141**	**2,645,381**	**112,070**	**125,823**	**275**	**1,836**
Delaware	507,780	213,689	149,601	139,877	3,476	1,033	—	104
Maryland	2,945,060	1,308,357	663,146	922,529	37,798	320	11,198	1,711
District of Columbia	567,358	88,260	311,229	150,211	4,777	—	12,882	—
Virginia	4,344,013	2,040,214	1,211,501	677,441	36,810	378,048	—	—
West Virginia	1,090,543	450,184	266,586	366,242	6,485	1,047	—	—
North Carolina	5,427,880	2,487,535	1,400,340	1,427,249	32,329	78,030	—	2,397
South Carolina	3,021,594	1,255,714	691,399	1,034,197	11,078	28,687	—	519
Georgia	4,866,893	2,045,002	1,526,428	1,226,199	43,146	19,075	7,042	—
Florida	9,440,091	5,136,121	3,159,664	857,146	71,510	201,591	5,046	9,013
South Atlantic	**32,211,213**	**15,025,076**	**9,379,894**	**6,801,091**	**247,409**	**707,832**	**36,167**	**13,744**
Kentucky	2,982,925	955,118	488,716	1,269,308	14,236	253,557	—	1,990
Tennessee	3,878,250	1,657,303	498,818	1,687,916	27,682	3,076	—	3,454
Alabama	3,207,631	1,302,387	691,377	1,186,239	23,933	1,555	—	2,140
Mississippi	1,832,908	790,177	487,087	519,850	14,470	21,116	—	208
East South Central	**11,901,713**	**4,704,985**	**2,165,998**	**4,663,313**	**80,320**	**279,305**	**—**	**7,792**
Arkansas	1,681,744	783,038	398,366	467,737	10,132	22,471	—	—
Louisiana	3,635,652	1,468,399	901,869	1,078,637	27,904	99,462	—	59,381
Oklahoma	2,020,649	951,278	577,934	390,110	12,302	89,025	—	—
Texas	12,729,950	5,379,785	3,611,630	3,282,205	95,362	346,559	—	14,409
West South Central	**20,067,995**	**8,582,499**	**5,489,800**	**5,218,690**	**145,700**	**557,516**	**—**	**73,791**
Montana	522,741	184,925	132,228	194,899	6,560	3,286	—	845
Idaho	670,346	273,636	207,742	186,386	1,536	1,042	—	3
Wyoming	495,293	105,797	116,119	267,670	3,368	1,916	—	423
Colorado	1,753,022	672,172	774,500	271,776	23,244	10,629	—	702
New Mexico	966,999	313,520	374,774	224,603	8,044	43,244	—	2,812
Arizona	3,042,414	1,349,944	1,078,447	531,334	31,758	41,232	1,616	8,084
Utah	895,016	307,277	300,178	251,135	5,773	30,603	—	50
Nevada	784,448	296,088	226,881	239,863	5,441	16,172	—	4
Mountain	**9,130,280**	**3,503,360**	**3,210,869**	**2,167,666**	**85,723**	**148,123**	**1,616**	**12,924**
Washington	3,006,474	1,204,201	705,426	1,015,841	26,536	52,511	691	1,268
Oregon	1,683,892	681,076	526,379	457,857	14,263	2,737	—	1,581
California	17,056,620	5,935,103	6,654,191	3,992,649	168,009	253,919	18,755	33,993
Pacific	**21,746,986**	**7,820,379**	**7,885,996**	**5,466,348**	**208,809**	**309,167**	**19,446**	**36,842**
Alaska	366,524	155,811	164,423	31,252	10,023	4,992	—	22
Hawaii	642,055	207,369	193,114	236,902	4,671	—	—	—
Alaska & Hawaii	**1,008,579**	**363,180**	**357,537**	**268,154**	**14,694**	**4,992**	**—**	**22**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.

TABLE 59B

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1988r—THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$162,387,858**	**$66,402,539**	**$49,141,145**	**$41,561,302**	**$1,503,799**	**$3,308,314**	**$296,215**	**$174,544**
Maine	755,686	322,225	182,442	234,496	9,609	6,799	—	115
New Hampshire	720,548	328,984	167,798	212,067	6,841	4,858	—	—
Vermont	374,830	158,335	120,437	89,066	2,921	4,048	—	24
Massachusetts	3,483,816	1,330,935	1,351,264	697,803	52,781	45,263	5,770	—
Rhode Island	493,704	200,192	177,303	101,034	6,752	8,422	—	—
Connecticut	2,252,403	949,257	827,931	432,582	31,754	2,290	7,932	657
New England	**8,080,987**	**3,289,929**	**2,827,175**	**1,767,047**	**110,658**	**71,680**	**13,702**	**795**
New York	10,726,601	3,918,987	4,483,743	1,488,908	139,787	544,101	148,971	2,104
New Jersey	5,313,393	2,034,551	2,116,397	1,087,481	72,924	—	393	1,648
Pennsylvania	8,119,948	3,310,080	2,092,745	2,573,185	83,059	9,024	46,675	5,179
Middle Atlantic	**24,159,942**	**9,263,618**	**8,692,885**	**5,149,574**	**295,771**	**553,125**	**196,039**	**8,930**
Ohio	7,715,883	2,938,741	2,008,841	2,516,188	58,689	189,223	3,711	491
Indiana	3,854,253	1,571,983	930,572	1,301,021	33,244	13,707	1,083	2,642
Illinois	8,031,559	3,294,780	2,234,448	2,016,338	46,955	412,637	26,247	155
Michigan	5,377,504	1,848,741	1,475,064	1,944,185	56,219	50,373	—	2,921
Wisconsin	2,617,446	1,078,121	741,387	752,800	27,427	12,797	—	4,914
East North Central	**27,596,645**	**10,732,366**	**7,390,312**	**8,530,532**	**222,534**	**678,738**	**31,041**	**11,123**
Minnesota	2,455,020	1,013,041	454,630	943,494	21,834	21,813	—	207
Iowa	1,735,032	810,267	407,700	469,288	18,621	29,115	—	41
Missouri	3,294,303	1,539,036	1,122,921	572,481	28,768	29,985	320	790
North Dakota	397,836	186,359	96,166	97,031	6,771	11,398	—	112
South Dakota	372,176	196,659	111,052	53,675	4,927	5,861	—	1
Nebraska	907,464	400,219	307,589	165,103	13,366	20,315	—	873
Kansas	1,688,223	713,256	583,064	363,697	16,986	11,173	—	47
West North Central	**10,850,053**	**4,858,837**	**3,083,122**	**2,664,767**	**111,273**	**129,660**	**320**	**2,072**
Delaware	500,623	212,519	146,511	137,226	3,235	1,023	—	109
Maryland	2,778,792	1,240,846	712,886	776,328	36,403	299	10,287	1,744
District of Columbia	575,860	91,984	317,186	149,159	4,016	—	13,514	—
Virginia	3,964,847	1,858,733	1,082,775	630,488	35,012	357,838	—	—
West Virginia	1,073,608	446,441	261,612	358,293	6,255	1,002	—	5
North Carolina	5,209,021	2,397,586	1,333,674	1,372,811	31,023	71,536	—	2,392
South Carolina	2,942,818	1,223,755	664,822	1,015,361	10,817	27,547	—	515
Georgia	4,638,736	1,954,564	1,418,158	1,201,863	38,964	18,394	6,792	—
Florida	9,043,631	4,898,349	3,019,875	851,499	69,914	191,506	5,067	7,421
South Atlantic	**30,727,935**	**14,324,777**	**8,957,500**	**6,493,028**	**235,640**	**669,145**	**35,660**	**12,185**
Kentucky	2,708,604	954,006	476,925	1,059,970	13,797	201,898	—	2,008
Tennessee	3,813,621	1,641,741	487,445	1,651,796	26,439	3,100	—	3,100
Alabama	3,121,519	1,271,363	662,498	1,160,588	23,151	1,598	—	2,322
Mississippi	1,740,854	762,751	465,298	479,762	15,651	17,144	—	248
East South Central	**11,384,599**	**4,629,860**	**2,092,166**	**4,352,116**	**79,039**	**223,740**	**—**	**7,678**
Arkansas	1,622,974	770,890	386,308	434,903	9,550	21,323	—	—
Louisiana	3,440,560	1,381,865	853,661	1,006,701	27,560	99,646	—	71,127
Oklahoma	2,009,395	957,978	569,845	380,200	13,529	87,843	—	—
Texas	12,289,296	5,150,193	3,483,524	3,219,083	92,737	327,314	—	16,444
West South Central	**19,362,225**	**8,260,927**	**5,293,339**	**5,040,887**	**143,376**	**536,126**	**—**	**87,571**
Montana	522,631	178,974	134,401	198,792	6,212	3,435	—	817
Idaho	632,306	256,583	197,389	174,789	2,516	1,029	—	*
Wyoming	486,404	105,205	117,769	257,676	3,468	1,801	—	486
Colorado	1,700,245	662,687	747,383	256,415	22,889	10,871	—	—
New Mexico	950,709	311,285	366,006	222,604	7,927	40,357	—	2,530
Arizona	2,883,383	1,291,436	1,016,067	499,937	30,755	38,032	1,616	5,541
Utah	940,943	323,937	313,818	262,663	5,830	34,641	—	53
Nevada	733,331	294,734	214,889	205,719	5,289	12,697	—	3
Mountain	**8,849,953**	**3,424,841**	**3,107,721**	**2,078,595**	**84,886**	**142,863**	**1,616**	**9,432**
Washington	2,854,508	1,117,629	680,473	978,096	26,894	49,831	573	1,012
Oregon	1,642,741	663,259	515,049	445,793	14,304	2,809	—	1,526
California	15,944,860	5,500,290	6,163,715	3,819,737	165,187	246,470	17,263	32,198
Pacific	**20,442,109**	**7,281,178**	**7,359,237**	**5,243,626**	**206,385**	**299,109**	**17,836**	**34,737**
Alaska	345,883	146,517	161,706	23,895	9,614	4,128	—	22
Hawaii	587,528	189,689	175,981	217,234	4,624	—	—	—
Alaska & Hawaii	**933,410**	**336,206**	**337,687**	**241,129**	**14,238**	**4,128**	**—**	**22**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred dollars.*

TABLE 60A

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1989p—THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$133,677,527**	**$52,199,755**	**$43,382,561**	**$34,120,006**	**$1,210,396**	**$2,498,112**	**$158,297**	**$108,402**
Maine	775,968	327,734	189,978	241,249	9,598	7,409	—	—
New Hampshire	685,189	300,763	158,386	213,857	6,556	5,627	—	—
Vermont	304,195	126,262	111,676	61,168	2,333	2,757	—	—
Massachusetts	3,267,733	1,257,256	1,360,797	561,197	50,801	29,276	8,406	—
Rhode Island	521,712	211,025	191,554	104,375	5,512	9,244	—	—
Connecticut	2,278,677	969,949	865,740	402,162	31,782	—	9,045	—
New England	**7,833,473**	**3,192,989**	**2,878,131**	**1,584,007**	**106,582**	**54,314**	**17,451**	—
New York	10,554,719	4,065,694	4,636,129	1,526,877	90,284	230,868	2,713	2,153
New Jersey	5,512,359	2,040,818	2,285,919	1,108,915	74,437	—	439	1,831
Pennsylvania	8,116,530	3,206,095	2,158,986	2,605,083	81,919	7,989	50,883	5,576
Middle Atlantic	**24,183,609**	**9,312,607**	**9,081,034**	**5,240,875**	**246,641**	**238,857**	**54,035**	**9,560**
Ohio	7,483,859	2,684,274	2,028,660	2,515,478	58,020	192,722	4,169	536
Indiana	3,170,011	1,132,124	825,943	1,170,407	29,089	8,590	1,138	2,720
Illinois	7,647,587	2,903,007	2,197,360	2,055,272	48,486	415,552	27,750	159
Michigan	5,099,206	1,709,195	1,422,077	1,874,005	51,758	39,392	—	2,779
Wisconsin	2,214,592	865,856	669,530	642,552	24,396	10,344	—	1,914
East North Central	**25,615,254**	**9,294,456**	**7,143,570**	**8,257,713**	**211,749**	**666,600**	**33,058**	**8,108**
Minnesota	1,621,765	497,017	277,526	816,342	16,921	13,751	—	207
Iowa	1,283,381	525,167	349,391	372,051	17,143	19,590	—	38
Missouri	2,522,641	1,033,251	975,005	472,456	24,604	17,240	—	84
North Dakota	216,844	95,760	50,982	63,148	3,352	3,497	—	106
South Dakota	214,886	89,936	77,617	43,155	2,654	1,522	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,171,236	472,646	412,598	269,792	14,855	1,300	—	45
West North Central	**7,030,751**	**2,713,775**	**2,143,119**	**2,036,945**	**79,530**	**56,901**	—	**482**
Delaware	400,778	157,708	126,465	113,274	3,227	—	—	104
Maryland	2,752,093	1,186,907	616,270	903,969	32,039	—	11,198	1,711
District of Columbia	567,358	88,260	311,229	150,211	4,777	—	12,882	—
Virginia	3,807,428	1,710,372	1,117,440	572,944	34,977	371,696	—	—
West Virginia	1,084,469	446,445	265,098	365,588	6,292	1,047	—	—
North Carolina	4,059,650	1,647,611	1,095,041	1,233,259	24,301	59,130	—	309
South Carolina	2,114,120	762,278	520,835	799,243	8,368	22,877	—	519
Georgia	3,393,482	1,107,893	1,209,201	1,034,719	29,566	5,060	7,042	—
Florida	7,456,644	4,054,074	2,553,849	604,952	55,328	174,383	5,046	9,013
South Atlantic	**25,636,022**	**11,161,546**	**7,815,428**	**5,778,159**	**198,874**	**634,192**	**36,167**	**11,655**
Kentucky	1,447,953	490,230	348,862	345,793	10,584	252,438	—	47
Tennessee	66,898	27,192	14,302	23,584	413	1,408	—	—
Alabama	2,089,486	781,982	533,487	762,274	11,516	—	—	227
Mississippi	996,165	374,910	315,510	276,129	10,356	19,107	—	153
East South Central	**4,600,501**	**1,674,314**	**1,212,160**	**1,407,779**	**32,869**	**272,953**	—	**427**
Arkansas	1,171,974	479,597	298,683	365,322	8,636	19,735	—	—
Louisiana	3,095,237	1,119,506	791,481	1,003,453	27,299	94,117	—	59,381
Oklahoma	1,473,448	628,011	432,678	315,242	11,812	85,704	—	—
Texas	10,270,431	4,118,198	2,918,825	2,912,749	77,556	242,247	—	857
West South Central	**16,011,090**	**6,345,312**	**4,441,667**	**4,596,766**	**125,303**	**441,803**	—	**60,239**
Montana	338,546	120,800	98,782	109,745	5,560	2,855	—	804
Idaho	581,272	229,543	178,926	171,376	1,296	128	—	3
Wyoming	337,030	62,130	57,543	214,258	1,939	735	—	423
Colorado	1,134,996	403,201	560,198	149,267	17,455	4,875	—	—
New Mexico	701,991	227,375	263,812	163,945	6,756	38,309	—	1,795
Arizona	1,768,023	749,311	648,759	342,721	14,192	13,040	—	—
Utah	698,842	243,492	218,731	206,425	4,714	25,454	—	26
Nevada	724,648	281,063	209,276	213,753	5,173	15,383	—	—
Mountain	**6,285,348**	**2,316,915**	**2,236,027**	**1,571,491**	**57,084**	**100,779**	—	**3,051**
Washington	1,186,936	621,647	395,431	158,469	10,559	1	—	829
Oregon	1,271,084	530,328	439,883	286,143	13,359	8	—	1,361
California	13,350,581	4,814,638	5,395,235	2,956,501	122,995	30,935	17,586	12,691
Pacific	**15,808,601**	**5,966,612**	**6,230,549**	**3,401,114**	**146,914**	**30,945**	**17,586**	**14,881**
Alaska	30,822	13,859	7,760	8,255	180	768	—	—
Hawaii	642,055	207,369	193,114	236,902	4,671	—	—	—
Alaska & Hawaii	**672,877**	**221,228**	**200,874**	**245,157**	**4,851**	**768**	—	—

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.

TABLE 60B

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1988r—THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$128,240,356**	**$50,472,485**	**$41,237,149**	**$32,739,382**	**$1,181,146**	**$2,343,706**	**$150,151**	**$116,336**
Maine	730,828	309,127	178,298	227,656	9,301	6,447	—	—
New Hampshire	662,754	293,177	150,545	207,737	6,501	4,794	—	—
Vermont	299,688	124,027	110,213	60,472	2,264	2,713	—	—
Massachusetts	2,983,653	1,147,541	1,241,211	516,802	47,986	24,344	5,770	—
Rhode Island	490,392	198,269	176,760	100,210	6,734	8,420	—	—
Connecticut	2,140,173	915,461	798,500	387,668	30,613	—	7,932	—
New England	**7,307,489**	**2,987,601**	**2,655,526**	**1,500,545**	**103,397**	**46,718**	**13,702**	**—**
New York	9,993,193	3,861,608	4,463,958	1,348,245	88,145	222,545	6,587	2,104
New Jersey	5,209,299	1,986,349	2,090,840	1,057,554	72,527	—	393	1,636
Pennsylvania	7,887,710	3,147,721	2,052,154	2,545,722	82,191	8,068	46,675	5,179
Middle Atlantic	**23,090,202**	**8,995,678**	**8,606,952**	**4,951,521**	**242,863**	**230,614**	**53,656**	**8,919**
Ohio	7,113,900	2,605,254	1,889,427	2,377,259	54,756	183,002	3,711	491
Indiana	3,192,355	1,160,374	824,563	1,165,820	29,020	8,853	1,083	2,642
Illinois	7,522,132	2,993,289	2,100,134	1,957,604	45,683	399,020	26,247	155
Michigan	4,892,160	1,653,706	1,321,648	1,822,447	49,809	41,629	—	2,921
Wisconsin	2,225,812	874,228	672,746	643,007	23,457	10,395	—	1,977
East North Central	**24,946,359**	**9,286,852**	**6,808,518**	**7,966,137**	**202,725**	**642,899**	**31,041**	**8,186**
Minnesota	1,660,724	520,599	281,469	825,667	17,326	15,456	—	207
Iowa	1,329,191	548,857	355,179	388,506	16,793	19,816	—	41
Missouri	2,518,806	1,057,945	956,540	462,720	24,954	16,566	—	81
North Dakota	217,118	96,624	50,549	61,335	3,322	5,176	—	112
South Dakota	209,482	89,495	75,233	40,163	2,692	1,898	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,187,510	495,598	407,540	268,310	14,631	1,382	—	47
West North Central	**7,122,830**	**2,809,119**	**2,126,510**	**2,046,701**	**79,718**	**60,293**	**—**	**489**
Delaware	395,265	157,796	123,727	110,617	3,016	—	—	109
Maryland	2,604,532	1,131,297	671,399	758,442	31,363	—	10,287	1,744
District of Columbia	575,860	91,984	317,186	149,159	4,016	—	13,514	—
Virginia	3,464,968	1,552,486	997,083	530,665	33,194	351,539	—	—
West Virginia	1,067,568	442,733	260,127	357,639	6,062	1,002	—	5
North Carolina	3,900,163	1,603,435	1,040,859	1,179,649	23,081	52,822	—	316
South Carolina	2,065,006	746,658	499,500	788,452	8,138	21,743	—	515
Georgia	3,229,767	1,063,145	1,117,635	1,010,687	26,701	4,807	6,792	—
Florida	7,152,619	3,870,289	2,444,653	606,453	53,918	164,818	5,067	7,421
South Atlantic	**24,455,748**	**10,659,823**	**7,472,171**	**5,491,764**	**189,489**	**596,732**	**35,660**	**10,110**
Kentucky	1,397,782	499,258	344,194	343,245	10,225	200,817	—	43
Tennessee	66,435	27,519	14,151	22,936	413	1,415	—	—
Alabama	2,022,725	761,805	510,910	738,755	11,052	—	—	202
Mississippi	933,745	355,089	294,223	257,416	11,648	15,231	—	139
East South Central	**4,420,687**	**1,643,671**	**1,163,478**	**1,362,351**	**33,339**	**217,463**	**—**	**384**
Arkansas	1,125,657	471,028	283,982	343,958	8,070	18,620	—	—
Louisiana	2,944,138	1,069,481	746,299	935,657	27,013	94,562	—	71,127
Oklahoma	1,468,764	640,043	431,006	300,184	13,036	84,496	—	—
Texas	9,865,272	3,919,724	2,790,048	2,853,309	74,941	226,233	—	1,017
West South Central	**15,403,832**	**6,100,276**	**4,251,334**	**4,433,107**	**123,060**	**423,911**	**—**	**72,144**
Montana	337,134	118,763	100,073	109,294	5,252	2,974	—	778
Idaho	545,260	213,712	169,039	160,118	2,277	114	—	*
Wyoming	328,758	62,147	58,010	205,481	2,017	617	—	486
Colorado	1,101,168	398,410	543,622	136,498	17,408	5,230	—	—
New Mexico	690,531	226,846	259,195	160,569	6,648	35,760	—	1,512
Arizona	1,699,842	723,714	623,139	326,947	14,129	12,262	—	(350)
Utah	745,718	260,512	230,783	219,978	5,073	29,343	—	29
Nevada	681,383	280,537	198,840	184,982	5,025	11,999	—	—
Mountain	**6,129,794**	**2,284,640**	**2,182,700**	**1,503,868**	**57,829**	**98,299**	**—**	**2,457**
Washington	1,104,158	572,181	373,950	147,148	10,268	1	—	612
Oregon	1,249,283	519,787	434,010	280,583	13,426	170	—	1,307
California	12,396,646	4,411,925	4,978,675	2,831,648	120,245	26,331	16,092	11,729
Pacific	**14,750,087**	**5,503,892**	**5,786,635**	**3,259,379**	**143,939**	**26,502**	**16,092**	**13,647**
Alaska	25,799	11,244	7,342	6,776	162	275	—	—
Hawaii	587,528	189,689	175,981	217,234	4,624	—	—	—
Alaska & Hawaii	**613,326**	**200,932**	**183,323**	**224,010**	**4,786**	**275**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred dollars.*
( ) Denotes negative value.

TABLE 61

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1984-1989—THOUSANDS OF DOLLARS

Year—Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR—1989p								
First Quarter	$ 40,168,743	$17,042,283	$11,742,115	$10,052,320	$ 379,648	$ 830,361	$ 79,736	$ 42,280
Second Quarter	39,829,755	15,251,797	12,459,704	10,756,498	380,639	857,736	78,548	44,833
Third Quarter	48,405,832	20,211,305	14,848,980	11,877,741	390,313	940,325	86,532	50,636
Fourth Quarter	40,713,144	16,109,106	12,540,845	10,675,968	391,108	881,253	84,214	30,650
Total	**$169,117,474**	**$68,614,491**	**$51,591,644**	**$43,362,526**	**$1,541,708**	**$3,509,674**	**$329,030**	**$168,399**
YEAR—1988r								
First Quarter	$ 39,016,776	$16,609,748	$11,367,297	$ 9,745,162	$ 375,630	$ 806,241	$ 72,820	$ 39,878
Second Quarter	37,228,913	14,195,361	11,643,545	10,103,272	374,611	800,063	70,981	41,080
Third Quarter	47,508,839	20,425,241	14,339,204	11,350,597	375,715	892,538	79,181	46,363
Fourth Quarter	38,633,330	15,172,189	11,791,099	10,362,271	377,843	809,472	73,233	47,223
Total	**$162,387,858**	**$66,402,539**	**$49,141,145**	**$41,561,302**	**$1,503,799**	**$3,308,314**	**$296,215**	**$174,544**
YEAR—1987								
First Quarter	$ 36,911,176	$15,538,031	$10,723,967	$ 9,365,935	$ 374,345	$ 781,436	$ 78,582	$ 48,879
Second Quarter	36,781,292	14,105,104	11,280,178	10,080,790	386,840	803,299	72,248	52,832
Third Quarter	45,058,203	19,146,820	13,469,845	11,050,602	372,533	889,609	76,886	51,907
Fourth Quarter	36,949,564	14,259,104	11,271,117	10,133,281	375,527	798,914	73,919	37,702
Total	**$155,700,236**	**$63,049,059**	**$46,745,107**	**$40,630,608**	**$1,509,246**	**$3,273,260**	**$301,635**	**$191,321**
YEAR—1986								
First Quarter	$ 37,653,132	$15,555,169	$10,724,906	$10,047,285	$ 384,848	$ 801,638	$ 83,113	$ 56,171
Second Quarter	35,577,168	13,238,115	10,967,967	10,112,652	363,391	772,993	74,248	47,802
Third Quarter	43,036,318	17,967,869	12,873,376	10,821,908	379,282	856,022	77,953	59,908
Fourth Quarter	36,200,506	14,149,450	10,844,037	9,924,209	370,909	783,510	76,657	51,733
Total	**$152,467,123**	**$60,910,603**	**$45,410,286**	**$40,906,054**	**$1,498,431**	**$3,214,164**	**$311,971**	**$215,614**
YEAR—1985								
First Quarter	$ 36,754,335	$15,166,967	$10,267,363	$10,046,679	$ 374,536	$ 768,455	$ 79,540	$ 50,797
Second Quarter	35,007,556	12,809,647	10,584,167	10,360,169	360,647	774,643	72,559	45,725
Third Quarter	41,420,795	16,852,682	12,406,550	10,822,584	370,430	836,349	81,215	50,986
Fourth Quarter	35,979,667	13,762,456	10,802,475	10,138,415	370,479	784,027	79,852	41,963
Total	**$149,162,352**	**$58,591,751**	**$44,060,554**	**$41,367,847**	**$1,476,092**	**$3,163,473**	**$313,165**	**$189,470**
YEAR—1984								
First Quarter	$ 34,722,044	$14,377,830	$ 9,511,784	$ 9,633,803	$ 343,630	$ 736,404	$ 76,587	$ 42,006
Second Quarter	33,455,487	12,356,594	9,731,940	10,183,560	334,520	731,098	71,322	46,453
Third Quarter	40,284,362	16,304,756	11,860,912	10,819,381	350,557	813,464	77,858	57,434
Fourth Quarter	34,630,610	13,076,961	10,149,085	10,159,044	347,224	763,657	76,958	57,681
Total	**$143,092,504**	**$56,116,141**	**$41,253,720**	**$40,795,789**	**$1,375,931**	**$3,044,623**	**$302,725**	**$203,574**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 62

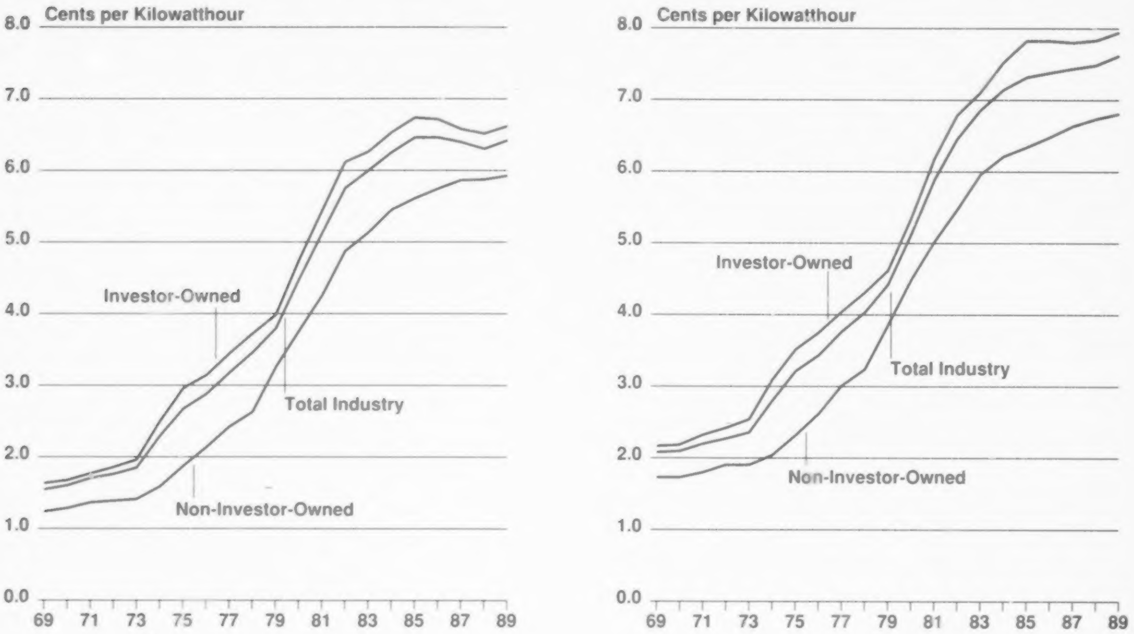
REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY QUARTER AND CLASS OF SERVICE
1984-1989—THOUSANDS OF DOLLARS

Year—Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR—1989p								
First Quarter	$ 31,603,234	$12,881,512	$ 9,856,073	$ 7,913,368	$ 299,575	$ 587,185	$ 36,681	$ 28,840
Second Quarter	31,496,515	11,633,008	10,465,624	8,421,815	300,116	608,738	37,290	29,924
Third Quarter	38,303,036	15,352,938	12,527,899	9,367,867	304,276	673,742	42,552	33,763
Fourth Quarter	32,274,742	12,332,297	10,532,964	8,416,956	306,429	628,447	41,774	15,875
Total	**$133,677,527**	**$52,199,755**	**$43,382,561**	**$34,120,006**	**$1,210,396**	**$2,498,112**	**$158,297**	**$108,402**
YEAR—1988r								
First Quarter	$ 30,586,173	$12,527,596	$ 9,517,873	$ 7,613,950	$ 296,877	$ 568,046	$ 34,928	$ 26,903
Second Quarter	29,529,510	10,825,823	9,766,111	8,012,865	294,898	567,262	36,094	26,457
Third Quarter	37,670,370	15,538,788	12,079,763	9,046,994	293,534	639,658	41,923	29,710
Fourth Quarter	30,454,303	11,580,278	9,873,402	8,065,573	295,837	568,740	37,206	33,266
Total	**$128,240,356**	**$50,472,485**	**$41,237,149**	**$32,739,382**	**$1,181,146**	**$2,343,706**	**$150,151**	**$116,336**
YEAR—1987								
First Quarter	$ 29,191,233	$11,800,957	$ 9,036,665	$ 7,431,625	$ 297,824	$ 549,082	$ 38,253	$ 36,828
Second Quarter	29,218,560	10,756,656	9,518,678	7,990,445	309,364	568,263	36,243	38,911
Third Quarter	35,718,875	14,535,734	11,393,379	8,780,918	293,624	641,314	37,062	36,844
Fourth Quarter	29,184,191	10,868,726	9,488,438	7,907,738	297,601	562,040	35,778	23,871
Total	**$123,312,860**	**$47,962,072**	**$39,437,160**	**$32,110,727**	**$1,198,413**	**$2,320,698**	**$147,336**	**$136,454**
YEAR—1986								
First Quarter	$ 29,895,007	$11,835,967	$ 9,061,657	$ 8,028,150	$ 304,671	$ 578,054	$ 42,513	$ 43,995
Second Quarter	28,374,923	10,096,138	9,292,294	8,064,825	285,522	563,399	37,802	34,943
Third Quarter	34,075,844	13,538,755	10,889,298	8,642,478	298,067	624,166	38,258	44,822
Fourth Quarter	28,728,696	10,771,084	9,139,116	7,882,870	289,695	568,473	38,272	39,186
Total	**$121,074,470**	**$46,241,943**	**$38,382,364**	**$32,618,323**	**$1,177,956**	**$2,334,092**	**$156,846**	**$162,947**
YEAR—1985								
First Quarter	$ 29,132,718	$11,519,273	$ 8,657,938	$ 8,031,567	$ 296,484	$ 548,544	$ 40,254	$ 38,660
Second Quarter	28,019,118	9,807,508	8,969,446	8,322,627	282,255	568,360	35,839	33,082
Third Quarter	33,012,579	12,802,412	10,512,910	8,721,651	292,695	605,980	41,028	35,903
Fourth Quarter	28,671,857	10,522,068	9,101,226	8,128,371	288,267	562,899	40,608	28,418
Total	**$118,836,272**	**$44,651,261**	**$37,241,520**	**$33,204,216**	**$1,159,701**	**$2,285,783**	**$157,728**	**$136,064**
YEAR—1984								
First Quarter	$ 27,321,801	$10,829,722	$ 7,998,735	$ 7,630,116	$ 280,121	$ 519,634	$ 35,810	$ 27,663
Second Quarter	26,600,968	9,408,608	8,205,744	8,135,552	270,379	518,066	33,850	28,768
Third Quarter	31,898,162	12,288,788	9,991,921	8,685,978	285,971	574,043	36,426	35,036
Fourth Quarter	27,517,146	9,947,714	8,523,932	8,153,364	282,807	532,386	36,493	40,449
Total	**$113,338,077**	**$42,474,833**	**$34,720,332**	**$32,605,010**	**$1,119,279**	**$2,144,129**	**$142,578**	**$131,916**

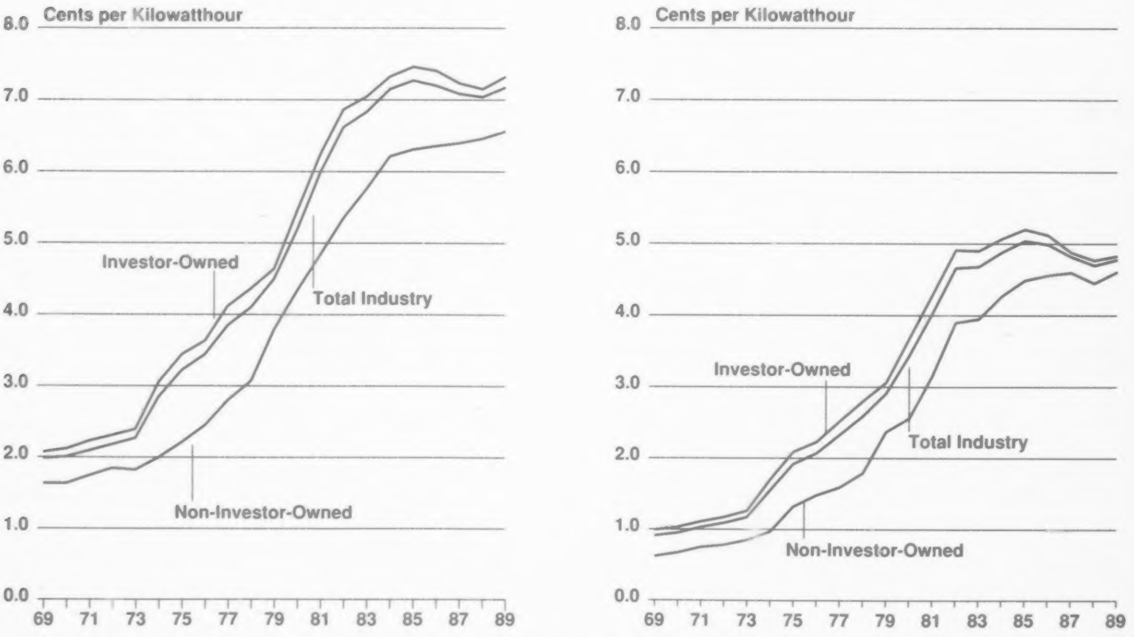
Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

CHART VIII-C
AVERAGE REVENUES PER KWH SOLD



TOTAL ULTIMATE CUSTOMERS

RESIDENTIAL CUSTOMERS



COMMERCIAL CUSTOMERS

INDUSTRIAL CUSTOMERS

Based on sales data in Tables 38 and 39, page 44, and revenue data in Tables 56 and 57, page 65

TABLE 63

AVERAGE REVENUES PER KILOWATTHOUR SOLD TOTAL ELECTRIC UTILITY INDUSTRY

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1989p	**7.63¢**	**7.19¢**	**4.79¢**	**10.60¢**	**5.07¢**	**6.20¢**	**6.46¢**
1988r	7.49	7.04	4.71	10.29	5.12	5.83	6.36
1987	7.45	7.10	4.82	10.49	5.19	6.16	6.39
1986	7.43	7.22	4.99	9.96	5.19	6.65	6.47
1985	7.39	7.27	5.04	10.08	5.09	6.66	6.47
1984	7.17	7.14	4.88	9.69	5.08	6.75	6.27
1983	6.83	6.80	4.68	9.50	5.00	6.90	6.00
1982	6.44	6.61	4.66	8.81	4.72	6.80	5.79
1981	5.86	6.00	4.03	7.96	4.18	5.67	5.16
1980	5.12	5.22	3.44	7.02	3.75	4.86	4.49
1979	4.43	4.50	2.91	6.21	3.06	4.43	3.82
1978	4.03	4.10	2.59	5.74	2.73	3.92	3.46
1977	3.78	3.84	2.33	5.39	2.69	3.46	3.21
1976	3.45	3.46	2.07	5.03	2.44	3.78	2.89
1975	3.21	3.23	1.92	4.74	2.24	3.72	2.70
1974	2.83	2.85	1.55	4.31	1.92	3.43	2.30
1973	2.38	2.30	1.17	3.63	1.47	2.20	1.86
1972	2.29	2.22	1.09	3.69	1.37	1.92	1.77
1971	2.19	2.12	1.03	3.53	1.29	1.72	1.69
1970	2.10	2.01	0.95	3.38	1.20	1.49	1.59
1969	2.09	1.99	0.91	3.25	1.16	1.39	1.54

Based on sales data in Table 38 and revenue data in Table 56. p Preliminary. r Revised.

TABLE 64

AVERAGE REVENUES PER KILOWATTHOUR SOLD INVESTOR-OWNED ELECTRIC UTILITIES

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1989p	**7.94¢**	**7.32¢**	**4.83¢**	**11.60¢**	**5.16¢**	**6.40¢**	**6.62¢**
1988r	7.78	7.16	4.77	11.36	5.28	6.26	6.51
1987	7.75	7.24	4.88	11.53	5.37	6.58	6.56
1986	7.78	7.40	5.12	11.38	5.43	6.94	6.70
1985	7.79	7.47	5.20	11.22	5.25	7.00	6.72
1984	7.53	7.33	5.07	10.78	5.26	6.97	6.52
1983	7.15	7.04	4.90	10.13	5.22	6.55	6.27
1982	6.81	6.86	4.91	9.54	4.80	6.77	6.10
1981	6.19	6.28	4.29	8.55	4.36	6.20	5.45
1980	5.36	5.47	3.68	7.58	3.95	5.17	4.72
1979	4.63	4.68	3.06	6.60	3.33	3.80	3.99
1978	4.31	4.36	2.80	6.18	2.96	3.59	3.70
1977	4.06	4.10	2.52	5.79	2.90	3.68	3.44
1976	3.73	3.69	2.23	5.43	2.69	3.82	3.11
1975	3.51	3.46	2.09	5.14	2.51	3.79	2.94
1974	3.09	3.05	1.70	4.66	2.17	3.48	2.50
1973	2.54	2.42	1.26	4.12	1.61	2.22	1.97
1972	2.42	2.30	1.17	3.95	1.50	1.94	1.86
1971	2.32	2.21	1.11	3.78	1.42	1.73	1.78
1970	2.22	2.09	1.03	3.62	1.33	1.51	1.68
1969	2.21	2.06	0.99	3.51	1.29	1.40	1.63

Based on sales data in Table 39 and revenue data in Table 57. p Preliminary. r Revised.

TABLE 65

AVERAGE ANNUAL REVENUE PER CUSTOMER

TOTAL ELECTRIC UTILITY INDUSTRY					INVESTOR-OWNED ELECTRIC UTILITIES				
Year	Total Ultimate Customers	Residential	Commercial	Industrial	Year	Total Ultimate Customers	Residential	Commercial	Industrial
1989p	**$1,573.54**	**$723.77**	**$4,370.35**	**$86,261.83**	**1989p**	**$1,623.80**	**$719.32**	**$4,773.49**	**$90,217.07**
1988r	1,536.46	711.78	4,255.93	84,088.95	1988r	1,584.24	706.82	4,638.54	88,899.76
1987	1,500.59	687.95	4,146.61	82,826.13	1987	1,551.79	683.65	4,547.63	88,447.85
1986	1,493.81	675.17	4,126.94	81,176.66	1986	1,553.65	671.60	4,548.55	88,389.35
1985	1,481.57	658.11	4,080.42	80,621.32	1985	1,555.15	661.10	4,522.66	88,394.19
1984	1,452.62	643.75	3,939.57	81,118.33	1984	1,511.99	640.47	4,346.35	82,193.29
1983	1,348.80	601.77	3,660.14	73,275.14	1983	1,397.10	599.44	4,011.41	75,219.20
1982	1,285.29	563.09	3,452.36	66,668.67	1982	1,338.79	562.54	3,867.11	74,322.38
1981	1,188.44	517.39	3,206.52	67,266.27	1981	1,239.87	514.38	3,499.79	N/A
1980	1,040.22	461.81	2,848.00	N/A	1980	1,083.26	457.29	3,022.55	N/A
1979	897.17	391.30	2,394.04	N/A	1979	928.41	387.34	2,555.09	N/A
1978	807.12	356.74	2,176.91	N/A	1978	858.50	363.56	2,384.37	N/A
1977	739.86	328.99	2,031.41	N/A	1977	789.43	336.24	2,234.30	N/A
1976	646.33	288.39	1,754.26	N/A	1976	692.11	297.14	1,942.05	N/A
1975	579.03	262.26	1,579.55	N/A	1975	626.39	275.86	1,763.39	N/A
1974	493.43	223.73	1,327.40	N/A	1974	534.25	234.33	1,474.97	N/A
1973	408.14	192.35	1,096.55	N/A	1973	433.66	197.38	1,197.68	N/A
1972	371.01	176.39	988.78	N/A	1972	391.66	179.49	1,071.15	N/A
1971	336.46	161.49	888.75	N/A	1971	354.57	163.64	961.77	N/A
1970	307.36	148.58	803.54	N/A	1970	321.42	149.42	861.21	N/A
1969	285.99	137.45	735.27	N/A	1969	298.71	138.06	784.21	N/A

Based on revenue data in Tables 56 and 57, and average number of customers per year. p Preliminary. r Revised.
N/A Not Available.

TABLE 66A

REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER

BY STATE—YEAR 1989p

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$1,573.54**	**6.46¢**	**24,343**	**$1,623.80**	**6.62¢**	**24,540**
Maine	1,277.96	7.01	18,236	1,292.98	6.97	18,560
New Hampshire	1,347.43	8.54	15,778	1,415.61	8.56	16,539
Vermont	1,312.65	7.66	17,136	1,354.97	7.47	18,146
Massachusetts	1,466.18	8.32	17,631	1,440.45	8.22	17,528
Rhode Island	1,224.37	8.26	14,824	1,227.14	8.24	14,885
Connecticut	1,679.93	8.77	19,155	1,670.49	8.83	18,909
New England	**1,461.60**	**8.28**	**17,662**	**1,459.72**	**8.24**	**17,722**
New York	1,610.72	8.81	18,275	1,531.54	9.42	16,263
New Jersey	1,709.85	8.82	19,396	1,717.72	8.82	19,465
Pennsylvania	1,624.48	7.33	22,151	1,656.74	7.31	22,675
Middle Atlantic	**1,636.34**	**8.26**	**19,801**	**1,612.26**	**8.47**	**19,042**
Ohio	1,744.93	5.72	30,507	1,830.14	5.69	32,151
Indiana	1,595.14	5.69	28,027	1,722.52	5.57	30,946
Illinois	1,713.97	7.48	22,916	1,750.18	7.48	23,398
Michigan	1,390.86	6.75	20,609	1,431.52	6.77	21,133
Wisconsin	1,185.22	5.44	21,784	1,212.33	5.41	22,401
East North Central	**1,569.41**	**6.30**	**24,899**	**1,632.80**	**6.30**	**25,935**
Minnesota	1,264.26	5.33	23,731	1,397.35	4.93	28,338
Iowa	1,306.98	5.91	22,129	1,359.10	5.81	23,380
Missouri	1,404.25	6.54	21,481	1,599.39	6.56	24,019
North Dakota	1,283.94	5.79	22,176	1,102.08	5.77	19,098
South Dakota	1,164.31	6.04	19,266	1,230.52	6.36	19,333
Nebraska	1,227.79	5.53	22,202	—	—	—
Kansas	1,408.75	6.43	21,902	1,494.56	6.29	23,760
West North Central	**1,325.53**	**5.98**	**22,181**	**1,453.48**	**5.93**	**24,519**
Delaware	1,659.22	6.34	26,155	1,800.38	6.12	29,412
Maryland	1,563.34	5.99	26,111	1,585.43	5.94	26,676
District of Columbia	2,629.43	5.88	44,736	2,629.43	5.88	44,736
Virginia	1,699.42	5.90	28,798	1,770.85	5.85	30,293
West Virginia	1,285.13	4.78	26,909	1,290.41	4.77	27,061
North Carolina	1,725.62	6.30	27,395	1,902.05	5.99	31,738
South Carolina	1,891.38	5.64	33,559	2,179.54	5.62	38,774
Georgia	1,674.83	6.34	26,407	2,075.20	6.19	33,515
Florida	1,503.46	6.93	21,685	1,516.26	6.84	22,153
South Atlantic	**1,631.92**	**6.24**	**26,141**	**1,729.58**	**6.11**	**28,301**
Kentucky	1,793.09	5.11	35,084	1,508.02	4.05	37,279
Tennessee	1,734.88	5.26	33,009	1,763.53	4.20	41,941
Alabama	1,730.56	5.75	30,117	1,875.94	5.68	33,030
Mississippi	1,633.30	6.18	26,443	1,925.70	6.42	30,015
East South Central	**1,731.22**	**5.47**	**31,660**	**1,749.74**	**5.13**	**34,117**
Arkansas	1,473.87	6.42	22,960	1,657.51	6.47	25,617
Louisiana	2,018.94	5.93	34,058	2,235.31	5.73	38,985
Oklahoma	1,312.01	5.56	23,590	1,412.09	5.17	27,298
Texas	1,781.76	5.68	31,391	1,959.31	5.51	35,533
West South Central	**1,726.06**	**5.76**	**29,943**	**1,911.30**	**5.58**	**34,240**
Montana	1,278.92	4.09	31,293	1,132.12	4.25	26,622
Idaho	1,438.42	3.79	37,991	1,494.34	3.71	40,256
Wyoming	2,046.33	4.31	47,523	2,185.24	3.91	55,900
Colorado	1,117.24	5.96	18,741	1,131.03	5.91	19,134
New Mexico	1,465.00	7.37	19,875	1,510.29	7.25	20,830
Arizona	1,940.46	7.52	25,787	1,985.35	8.18	24,279
Utah	1,441.61	5.79	24,902	1,460.82	5.76	25,353
Nevada	1,500.05	5.28	28,423	1,466.46	5.54	26,460
Mountain	**1,507.24**	**5.88**	**25,633**	**1,505.96**	**5.82**	**25,864**
Washington	1,417.97	3.58	39,637	1,207.37	4.77	25,292
Oregon	1,347.91	4.27	31,564	1,293.42	4.68	27,635
California	1,461.70	8.38	17,433	1,468.62	8.91	16,476
Pacific	**1,446.08**	**6.65**	**21,738**	**1,429.82**	**7.83**	**18,252**
Alaska	1,662.54	9.12	18,227	2,005.72	10.60	18,929
Hawaii	1,790.28	8.06	22,224	1,790.28	8.06	22,224
Alaska & Hawaii	**1,741.65**	**8.41**	**20,702**	**1,799.13**	**8.15**	**22,089**

p Preliminary.

TABLE 66B

REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER

BY STATE—YEAR 1988r

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$1,536.46**	**6.36¢**	**24,167**	**$1,584.24**	**6.51¢**	**24,325**
Maine	1,233.33	6.71	18,385	1,247.25	6.67	18,704
New Hampshire	1,335.58	8.47	15,774	1,404.30	8.48	16,556
Vermont	1,325.40	7.72	17,161	1,370.40	7.53	18,200
Massachusetts	1,373.75	7.80	17,616	1,344.16	7.67	17,534
Rhode Island	1,174.14	7.94	14,792	1,176.62	7.92	14,851
Connecticut	1,602.87	8.37	19,141	1,592.07	8.43	18,894
New England	**1,394.06**	**7.89**	**17,669**	**1,389.96**	**7.84**	**17,740**
New York	1,539.08	8.54	18,032	1,466.93	9.15	16,034
New Jersey	1,640.01	8.50	19,286	1,646.44	8.51	19,358
Pennsylvania	1,599.20	7.19	22,229	1,630.29	7.16	22,757
Middle Atlantic	**1,580.44**	**8.03**	**19,692**	**1,558.62**	**8.23**	**18,939**
Ohio	1,682.20	5.75	29,274	1,758.78	5.71	30,781
Indiana	1,627.40	5.83	27,915	1,758.21	5.71	30,804
Illinois	1,706.99	7.32	23,326	1,739.88	7.30	23,839
Michigan	1,357.55	6.51	20,837	1,392.31	6.51	21,375
Wisconsin	1,203.72	5.49	21,945	1,235.10	5.47	22,594
East North Central	**1,550.73**	**6.27**	**24,747**	**1,609.48**	**6.25**	**25,763**
Minnesota	1,296.03	5.38	24,093	1,448.47	5.01	28,904
Iowa	1,348.95	6.03	22,366	1,416.75	5.99	23,662
Missouri	1,419.43	6.54	21,700	1,618.68	6.67	24,270
North Dakota	1,290.43	5.98	21,567	1,104.29	6.08	18,152
South Dakota	1,150.25	5.98	19,246	1,207.84	6.27	19,264
Nebraska	1,172.83	5.28	22,219	—	—	—
Kansas	1,450.08	6.54	22,156	1,538.69	6.41	24,003
West North Central	**1,344.30**	**6.01**	**22,380**	**1,489.31**	**6.01**	**24,785**
Delaware	1,685.19	6.65	25,339	1,835.19	6.49	28,279
Maryland	1,511.63	5.84	25,872	1,536.62	5.80	26,485
District of Columbia	2,695.34	6.14	43,902	2,695.34	6.14	43,902
Virginia	1,594.35	5.63	28,298	1,654.98	5.57	29,701
West Virginia	1,277.63	4.80	26,623	1,282.91	4.79	26,772
North Carolina	1,692.45	6.21	27,246	1,871.55	5.93	31,547
South Carolina	1,883.06	5.58	33,743	2,174.53	5.63	38,646
Georgia	1,641.03	6.24	26,282	2,025.63	6.10	33,181
Florida	1,486.52	7.03	21,133	1,506.02	6.98	21,570
South Atlantic	**1,598.15**	**6.19**	**25,831**	**1,695.12**	**6.07**	**27,907**
Kentucky	1,650.99	5.00	32,989	1,473.49	4.33	34,020
Tennessee	1,731.62	5.28	32,810	1,777.42	4.34	40,940
Alabama	1,710.10	5.50	31,084	1,839.93	5.60	32,828
Mississippi	1,573.63	6.16	25,560	1,822.09	6.30	28,904
East South Central	**1,680.50**	**5.39**	**31,204**	**1,701.70**	**5.22**	**32,606**
Arkansas	1,443.34	6.36	22,682	1,618.26	6.30	25,699
Louisiana	1,943.36	5.82	33,394	2,127.48	5.62	37,831
Oklahoma	1,310.46	5.54	23,642	1,413.45	5.19	27,226
Texas	1,738.83	5.60	31,048	1,903.88	5.41	35,209
West South Central	**1,684.29**	**5.69**	**29,603**	**1,855.82**	**5.48**	**33,850**
Montana	1,254.60	4.14	30,305	1,097.94	4.36	25,205
Idaho	1,374.17	3.70	37,104	1,420.67	3.62	39,271
Wyoming	2,011.55	4.38	45,885	2,127.82	3.99	53,295
Colorado	1,093.80	5.91	18,516	1,106.46	5.83	18,984
New Mexico	1,463.67	7.48	19,556	1,511.16	7.40	20,433
Arizona	1,885.70	7.45	25,320	1,957.18	8.25	23,722
Utah	1,535.50	6.25	24,582	1,584.39	6.33	25,019
Nevada	1,502.52	5.45	27,580	1,480.06	5.74	25,796
Mountain	**1,486.78**	**5.92**	**25,119**	**1,496.13**	**5.92**	**25,269**
Washington	1,377.07	3.50	39,344	1,153.87	4.69	24,593
Oregon	1,323.05	4.30	30,756	1,276.96	4.73	26,988
California	1,397.98	7.96	17,571	1,397.63	8.40	16,644
Pacific	**1,388.72**	**6.39**	**21,749**	**1,365.12**	**7.47**	**18,285**
Alaska	1,586.01	8.78	18,057	1,681.68	9.11	18,453
Hawaii	1,676.03	7.61	22,020	1,676.03	7.61	22,020
Alaska & Hawaii	**1,641.50**	**8.01**	**20,500**	**1,676.27**	**7.66**	**21,870**

r Revised

TABLE 67A

REVENUE AND USE PER RESIDENTIAL CUSTOMER

BY STATE—YEAR 1989p

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$723.77**	**7.63¢**	**9.489**	**$719.32**	**7.94¢**	**9,059**
Maine	612.39	8.52	7.189	613.76	8.49	7,231
New Hampshire	703.40	9.54	7.371	716.42	9.69	7,394
Vermont	639.47	7.86	8.134	645.95	7.70	8,390
Massachusetts	630.96	9.08	6.947	625.43	9.12	6,857
Rhode Island	557.88	8.99	6.203	557.33	8.98	6,209
Connecticut	776.64	9.59	8.095	782.66	9.64	8,122
New England	**666.56**	**9.13**	**7.297**	**668.35**	**9.17**	**7.285**
New York	664.71	10.77	6.173	670.24	11.04	6,071
New Jersey	723.80	10.04	7.211	724.14	10.06	7,200
Pennsylvania	735.14	8.84	8.319	735.05	8.82	8,330
Middle Atlantic	**700.79**	**9.85**	**7.111**	**703.05**	**9.97**	**7,055**
Ohio	726.69	7.78	9.344	732.99	7.93	9,241
Indiana	717.35	6.95	10.329	694.98	6.91	10,059
Illinois	743.73	9.93	7.488	735.31	10.15	7,246
Michigan	527.25	7.53	6.999	532.62	7.56	7,048
Wisconsin	548.50	6.67	8.222	531.43	6.71	7,922
East North Central	**663.81**	**7.98**	**8.321**	**660.24**	**8.13**	**8,124**
Minnesota	578.83	6.74	8.585	485.27	6.53	7,427
Iowa	698.49	7.57	9.222	648.37	7.84	8,266
Missouri	727.07	7.34	9.908	745.74	7.62	9,784
North Dakota	713.56	6.15	11.593	580.35	6.09	9,534
South Dakota	706.61	6.85	10.314	612.67	7.36	8,321
Nebraska	638.18	6.17	10.337	—	—	—
Kansas	680.46	7.69	8.848	688.52	7.54	9,128
West North Central	**670.83**	**7.10**	**9.446**	**643.38**	**7.35**	**8,753**
Delaware	776.71	8.17	9.507	788.72	8.27	9,532
Maryland	771.85	6.87	11.240	760.49	6.84	11,122
District of Columbia	466.42	6.02	7.748	466.42	6.02	7,748
Virginia	896.81	6.88	13.027	895.90	6.89	12,995
West Virginia	605.59	5.90	10.257	606.45	5.90	10,284
North Carolina	906.58	7.60	11.935	901.96	7.36	12,253
South Carolina	902.90	7.18	12.569	922.23	7.21	12,798
Georgia	789.26	7.16	11.021	773.59	7.27	10,644
Florida	924.41	7.69	12.025	931.14	7.68	12,130
South Atlantic	**860.57**	**7.29**	**11.798**	**856.31**	**7.24**	**11,824**
Kentucky	651.37	5.62	11.586	591.95	5.21	11,366
Tennessee	843.27	5.71	14.764	804.93	4.80	16,778
Alabama	802.22	6.56	12.236	807.50	6.89	11,717
Mississippi	810.56	6.83	11.865	851.19	7.22	11,791
East South Central	**780.26**	**6.08**	**12.842**	**737.33**	**6.31**	**11,679**
Arkansas	785.35	7.72	10.171	790.64	7.93	9,969
Louisiana	925.59	7.29	12.696	920.86	7.18	12,823
Oklahoma	714.87	6.81	10.499	694.49	6.51	10,674
Texas	865.92	6.99	12.388	904.22	6.98	12,950
West South Central	**847.49**	**7.08**	**11.970**	**871.49**	**7.03**	**12,398**
Montana	541.50	5.36	10.110	486.29	5.30	9,183
Idaho	697.77	4.86	14.372	704.71	4.84	14,568
Wyoming	535.43	6.05	8.850	483.38	5.97	8,091
Colorado	490.85	7.02	6.995	453.22	7.16	6,327
New Mexico	555.46	9.03	6.155	560.43	8.81	6,364
Arizona	970.09	8.85	10.962	952.96	9.28	10,266
Utah	556.09	7.45	7.460	567.87	7.79	7,289
Nevada	653.33	5.74	11.378	654.06	5.76	11,346
Mountain	**665.73**	**7.23**	**9.202**	**636.02**	**7.16**	**8,880**
Washington	639.92	4.44	14.409	712.74	5.18	13,750
Oregon	627.58	4.80	13.087	622.33	4.96	12,553
California	581.30	9.31	6.241	603.82	9.72	6,210
Pacific	**593.49**	**7.45**	**7.971**	**615.24**	**8.26**	**7,445**
Alaska	828.17	9.78	8.469	1,081.49	10.61	10,196
Hawaii	670.19	9.26	7.236	670.19	9.26	7,236
Alaska & Hawaii	**729.93**	**9.48**	**7.702**	**686.55**	**9.34**	**7,353**

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TABLE 67B

REVENUE AND USE PER RESIDENTIAL CUSTOMER

BY STATE—YEAR 1988r

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$711.78**	**7.49¢**	**9,498**	**$706.82**	**7.78¢**	**9,082**
Maine	590.69	8.25	7,156	592.23	8.23	7,196
New Hampshire	700.64	9.49	7,386	715.03	9.62	7,433
Vermont	639.27	7.87	8,120	649.90	7.71	8,428
Massachusetts	591.44	8.46	6,994	582.91	8.44	6,907
Rhode Island	533.68	8.63	6,182	533.24	8.62	6,188
Connecticut	743.30	9.22	8,063	748.34	9.25	8,089
New England	**636.93**	**8.72**	**7,306**	**637.48**	**8.73**	**7,299**
New York	637.85	10.48	6,085	643.00	10.75	5,979
New Jersey	714.29	9.79	7,293	714.32	9.81	7,285
Pennsylvania	730.19	8.76	8,338	729.94	8.74	8,352
Middle Atlantic	**684.90**	**9.65**	**7,094**	**686.76**	**9.76**	**7,037**
Ohio	714.44	7.59	9,412	718.68	7.70	9,333
Indiana	742.10	7.06	10,518	721.35	7.01	10,291
Illinois	773.67	9.76	7,930	765.69	9.93	7,710
Michigan	517.10	7.29	7,090	521.82	7.29	7,154
Wisconsin	558.33	6.67	8,368	543.86	6.72	8,097
East North Central	**670.92**	**7.88**	**8,519**	**667.18**	**7.99**	**8,349**
Minnesota	596.42	6.79	8,787	514.48	6.63	7,764
Iowa	722.98	7.61	9,502	681.69	7.93	8,593
Missouri	747.52	7.33	10,196	773.44	7.63	10,132
North Dakota	714.36	6.22	11,487	585.12	6.13	9,552
South Dakota	704.89	6.78	10,398	613.33	7.25	8,465
Nebraska	625.19	5.92	10,552	—	—	—
Kansas	716.19	7.82	9,160	732.18	7.71	9,498
West North Central	**688.80**	**7.11**	**9,688**	**673.20**	**7.42**	**9,077**
Delaware	794.63	8.39	9,467	814.32	8.56	9,508
Maryland	749.04	6.71	11,156	741.23	6.69	11,082
District of Columbia	490.77	6.28	7,819	490.77	6.28	7,819
Virginia	838.94	6.49	12,921	834.05	6.48	12,864
West Virginia	605.79	5.92	10,224	606.66	5.92	10,251
North Carolina	891.81	7.43	12,003	897.68	7.25	12,375
South Carolina	898.30	7.12	12,612	920.57	7.15	12,867
Georgia	774.16	7.04	11,000	760.34	7.15	10,633
Florida	909.95	7.79	11,679	920.29	7.82	11,764
South Atlantic	**841.52**	**7.21**	**11,674**	**839.38**	**7.18**	**11,696**
Kentucky	658.15	5.64	11,669	609.34	5.29	11,527
Tennessee	843.87	5.71	14,790	826.47	4.87	16,981
Alabama	792.65	6.46	12,277	795.84	6.72	11,839
Mississippi	791.46	6.70	11,815	813.37	6.94	11,720
East South Central	**776.47**	**6.03**	**12,875**	**731.68**	**6.21**	**11,778**
Arkansas	784.66	7.61	10,314	789.17	7.71	10,230
Louisiana	887.18	7.11	12,487	880.25	6.96	12,641
Oklahoma	723.07	6.72	10,754	710.58	6.49	10,952
Texas	838.25	6.88	12,182	870.89	6.83	12,756
West South Central	**825.36**	**6.96**	**11,857**	**845.68**	**6.87**	**12,302**
Montana	514.14	5.41	9,503	465.33	5.41	8,605
Idaho	661.53	4.75	13,915	663.61	4.71	14,087
Wyoming	532.04	6.11	8,703	481.86	6.04	7,975
Colorado	488.28	6.94	7,036	451.39	7.07	6,382
New Mexico	561.17	9.14	6,136	568.87	8.99	6,329
Arizona	952.16	8.78	10,850	944.43	9.35	10,106
Utah	593.44	7.81	7,602	616.86	8.26	7,467
Nevada	696.68	6.11	11,402	700.41	6.16	11,371
Mountain	**662.34**	**7.28**	**9,103**	**638.74**	**7.28**	**8,770**
Washington	608.00	4.35	13,991	673.38	5.07	13,286
Oregon	615.22	4.80	12,824	613.08	5.00	12,257
California	551.18	8.69	6,340	567.03	9.00	6,297
Pacific	**564.64**	**7.08**	**7,973**	**580.68**	**7.79**	**7,457**
Alaska	786.74	9.42	8,350	877.60	9.01	9,735
Hawaii	626.56	8.83	7,096	626.56	8.83	7,096
Alaska & Hawaii	**687.56**	**9.08**	**7,573**	**636.75**	**8.84**	**7,203**

r Revised.

TABLE 68A

REVENUE AND USE PER COMMERCIAL CUSTOMER

BY STATE—YEAR 1989p

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 4,370.35**	**7.19¢**	**60,823**	**$ 4,773.49**	**7.32¢**	**65,218**
Maine	2,967.39	7.36	40,325	3,044.27	7.33	41,525
New Hampshire	2,527.39	8.78	28,779	2,580.04	8.80	29,324
Vermont	3,534.83	8.15	43,359	3,967.46	8.08	49,132
Massachusetts	5,398.63	8.12	66,519	5,608.20	8.01	70,015
Rhode Island	4,431.85	8.00	55,391	4,460.25	7.99	55,796
Connecticut	7,263.29	8.73	83,157	7,455.82	8.72	85,469
New England	**5,012.08**	**8.26**	**60,651**	**5,198.48**	**8.20**	**63,368**
New York	5,772.06	9.91	58,264	5,864.30	9.98	58,758
New Jersey	6,112.90	8.73	70,029	6,175.09	8.72	70,803
Pennsylvania	4,246.50	7.77	54,686	4,305.71	7.76	55,460
Middle Atlantic	**5,383.58**	**9.00**	**59,788**	**5,463.34**	**9.04**	**60,445**
Ohio	4,951.41	7.22	68,600	5,282.39	7.26	72,782
Indiana	3,961.13	6.17	64,203	4,212.55	6.12	68,843
Illinois	5,385.73	7.83	68,762	5,466.67	7.88	69,354
Michigan	4,200.36	7.83	53,636	4,233.58	8.00	52,911
Wisconsin	3,125.72	5.69	54,941	3,521.49	5.88	59,899
East North Central	**4,509.06**	**7.17**	**62,879**	**4,736.81**	**7.25**	**65,306**
Minnesota	2,497.16	5.97	41,812	2,222.84	5.81	38,236
Iowa	2,597.77	6.45	40,271	2,777.51	6.49	42,821
Missouri	4,684.32	6.50	72,091	5,475.16	6.64	82,435
North Dakota	2,384.83	6.59	36,178	1,748.10	6.48	26,978
South Dakota	2,749.52	6.46	42,533	2,930.82	6.64	44,138
Nebraska	2,631.15	5.98	44,017	—	—	—
Kansas	3,744.69	6.50	57,574	4,664.92	6.30	74,026
West North Central	**3,309.95**	**6.36**	**52,075**	**3,741.37**	**6.43**	**58,210**
Delaware	5,036.55	6.76	74,493	5,741.10	6.55	87,673
Maryland	3,751.46	6.65	56,454	3,765.16	6.64	56,714
District of Columbia	11,814.48	6.29	187,699	11,814.48	6.29	187,699
Virginia	4,861.29	6.05	80,292	5,277.56	5.96	88,519
West Virginia	2,855.74	5.42	52,657	2,868.35	5.42	52,959
North Carolina	3,735.73	6.28	59,493	3,804.63	6.07	62,722
South Carolina	3,520.38	6.22	56,605	3,836.50	6.18	62,036
Georgia	5,348.61	7.22	74,089	6,436.65	7.25	88,804
Florida	4,657.96	6.58	70,839	4,865.64	6.46	75,321
South Atlantic	**4,444.70**	**6.48**	**68,556**	**4,729.41**	**6.38**	**74,122**
Kentucky	2,770.67	5.38	51,521	3,025.58	5.09	59,452
Tennessee	2,006.93	6.38	31,458	3,710.85	5.01	73,997
Alabama	3,182.30	6.71	47,436	3,820.23	6.74	56,683
Mississippi	3,550.95	7.15	49,685	4,523.89	7.23	62,587
East South Central	**2,779.18**	**6.37**	**43,661**	**3,689.43**	**6.24**	**59,111**
Arkansas	3,359.70	6.71	50,097	3,826.91	6.61	57,903
Louisiana	4,828.38	7.02	68,823	5,489.49	6.96	78,870
Oklahoma	3,159.30	5.83	54,216	3,726.42	5.46	68,275
Texas	4,290.86	6.12	70,122	4,809.11	6.02	79,928
West South Central	**4,127.69**	**6.26**	**65,966**	**4,698.80**	**6.14**	**76,517**
Montana	2,197.57	4.67	47,011	2,242.71	4.46	50,293
Idaho	2,965.50	4.27	69,505	2,992.72	4.23	70,730
Wyoming	2,845.01	5.30	53,677	2,508.32	5.01	50,072
Colorado	3,933.41	5.85	67,279	4,956.54	5.61	88,422
New Mexico	4,176.36	8.13	51,385	4,915.35	8.31	59,156
Arizona	6,709.14	7.91	84,807	6,569.18	8.68	75,640
Utah	5,051.89	6.69	75,492	5,307.72	6.92	76,670
Nevada	3,307.69	6.02	54,924	3,284.97	6.11	53,754
Mountain	**4,301.62**	**6.47**	**66,493**	**4,497.76**	**6.42**	**70,031**
Washington	3,093.30	4.11	75,322	3,758.64	4.95	75,886
Oregon	3,286.99	4.71	69,847	3,450.72	5.02	68,725
California	4,768.51	9.05	52,685	4,966.39	9.40	52,814
Pacific	**4,421.31**	**7.74**	**57,120**	**4,723.58**	**8.41**	**56,192**
Alaska	5,447.91	8.84	61,652	3,981.61	12.85	30,977
Hawaii	4,106.88	9.21	44,614	4,106.88	9.21	44,614
Alaska & Hawaii	**4,631.13**	**9.03**	**51,275**	**4,101.90**	**9.31**	**44,071**

p Preliminary.

TABLE 68B

REVENUE AND USE PER COMMERCIAL CUSTOMER

BY STATE—YEAR 1988r

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 4,255.93**	**7.04¢**	**60,437**	**$ 4,638.54**	**7.16¢**	**64,748**
Maine	2,873.19	7.09	40,498	2,949.41	7.07	41,721
New Hampshire	2,524.08	8.65	29,171	2,572.10	8.67	29,659
Vermont	3,618.99	8.28	43,728	4,087.56	8.19	49,907
Massachusetts	5,097.07	7.68	66,367	5,266.17	7.56	69,660
Rhode Island	4,240.89	7.66	55,387	4,266.69	7.65	55,785
Connecticut	6,934.10	8.31	83,420	7,104.79	8.29	85,653
New England	**4,795.32**	**7.89**	**60,784**	**4,959.36**	**7.82**	**63,422**
New York	5,677.44	9.63	58,974	5,770.12	9.70	59,492
New Jersey	5,705.68	8.41	67,822	5,760.00	8.40	68,561
Pennsylvania	4,130.09	7.66	53,884	4,186.69	7.66	54,642
Middle Atlantic	**5,213.49**	**8.78**	**59,395**	**5,290.76**	**8.81**	**60,055**
Ohio	4,707.39	6.98	67,402	5,010.31	7.01	71,517
Indiana	4,031.40	6.25	64,462	4,290.17	6.20	69,199
Illinois	5,257.31	7.59	69,281	5,318.79	7.61	69,924
Michigan	4,024.28	7.54	53,344	4,032.81	7.66	52,629
Wisconsin	3,176.52	5.81	54,673	3,585.80	6.02	59,525
East North Central	**4,392.39**	**7.01**	**62,645**	**4,601.92**	**7.07**	**65,086**
Minnesota	2,536.18	5.87	43,219	2,280.50	5.67	40,229
Iowa	2,653.54	6.66	39,841	2,848.02	6.73	42,289
Missouri	4,660.41	6.50	71,716	5,474.64	6.64	82,495
North Dakota	2,246.44	7.41	30,299	1,751.11	8.32	21,038
South Dakota	2,705.82	6.41	42,236	2,874.78	6.53	44,033
Nebraska	2,471.61	5.69	43,400	—	—	—
Kansas	3,753.47	6.57	57,146	4,734.16	6.35	74,550
West North Central	**3,288.70**	**6.36**	**51,688**	**3,770.55**	**6.48**	**58,212**
Delaware	5,155.03	6.96	74,078	5,895.41	6.78	86,942
Maryland	4,073.24	6.52	62,499	4,131.51	6.51	63,434
District of Columbia	12,191.04	6.62	184,204	12,191.04	6.62	184,204
Virginia	4,509.44	5.75	78,392	4,890.13	5.66	86,323
West Virginia	2,859.36	5.44	52,593	2,872.24	5.43	52,898
North Carolina	3,673.89	6.23	58,962	3,738.48	6.03	61,977
South Carolina	3,494.49	6.21	56,244	3,812.08	6.17	61,739
Georgia	5,193.79	7.13	72,847	6,167.38	7.17	86,069
Florida	4,595.95	6.72	68,422	4,835.24	6.64	72,810
South Atlantic	**4,381.38**	**6.47**	**67,708**	**4,669.43**	**6.38**	**73,160**
Kentucky	2,796.26	5.43	51,472	3,050.23	5.19	58,786
Tennessee	2,067.31	6.39	32,366	3,729.89	5.18	71,952
Alabama	3,170.33	6.62	47,913	3,742.85	6.63	56,490
Mississippi	3,509.96	6.99	50,200	4,270.16	6.99	61,114
East South Central	**2,797.47**	**6.33**	**44,228**	**3,612.83**	**6.18**	**58,466**
Arkansas	3,308.43	6.58	50,295	3,715.87	6.39	58,147
Louisiana	4,606.54	6.83	67,489	5,181.23	6.75	76,804
Oklahoma	3,131.62	5.83	53,702	3,724.36	5.49	67,860
Texas	4,170.52	6.07	68,701	4,635.34	5.92	78,311
West South Central	**4,012.18**	**6.19**	**64,833**	**4,531.87**	**6.03**	**75,148**
Montana	2,215.57	4.80	46,201	2,248.07	4.64	48,464
Idaho	2,876.97	4.13	69,729	2,892.17	4.08	70,949
Wyoming	2,884.51	5.33	54,142	2,503.65	5.02	49,878
Colorado	3,841.81	5.75	66,837	4,865.54	5.50	88,461
New Mexico	4,109.89	8.30	49,511	4,901.85	8.48	57,778
Arizona	6,462.79	7.87	82,122	6,436.33	8.84	72,826
Utah	5,384.47	6.96	77,314	5,748.45	7.32	78,527
Nevada	3,363.21	6.02	55,848	3,361.16	6.12	54,904
Mountain	**4,239.22**	**6.45**	**65,741**	**4,483.23**	**6.45**	**69,527**
Washington	3,026.09	3.98	76,032	3,657.21	4.93	74,148
Oregon	3,220.75	4.79	67,214	3,399.47	5.15	66,002
California	4,517.03	8.55	52,821	4,698.33	8.81	53,324
Pacific	**4,206.88**	**7.36**	**57,121**	**4,487.19**	**7.98**	**56,231**
Alaska	5,421.29	8.37	64,806	3,776.68	11.93	31,650
Hawaii	3,856.02	8.74	44,134	3,856.02	8.74	44,134
Alaska & Hawaii	**4,474.70**	**8.56**	**52,305**	**3,852.78**	**8.83**	**43,624**

r Revised.

TABLE 69A

REVENUE AND USE PER INDUSTRIAL CUSTOMER

BY STATE—YEAR 1989p

State/Division	Total Electric Utility Industry: Avg. Annual Revenue per Customer	Total Electric Utility Industry: Avg. Revenue per kWh Sold	Total Electric Utility Industry: Avg. Annual kWh Use per Customer	Investor-Owned Electric Utilities: Avg. Annual Revenue per Customer	Investor-Owned Electric Utilities: Avg. Revenue per kWh Sold	Investor-Owned Electric Utilities: Avg. Annual kWh Use per Customer
Total United States	**$ 86,261.83**	**4.79¢**	**1,800,780**	**$ 90,217.07**	**4.83¢**	**1,869,125**
Maine	90,138.60	5.38	1,676,256	92,255.68	5.34	1,727,385
New Hampshire	136,937.83	7.10	1,927,734	138,239.69	7.13	1,939,550
Vermont	72,494.56	6.55	1,107,166	466,929.20	5.94	7,855,649
Massachusetts	62,456.31	7.27	859,351	69,809.29	6.86	1,017,020
Rhode Island	39,137.07	7.52	520,119	39,135.85	7.50	521,616
Connecticut	94,992.80	7.23	1,313,838	87,426.44	7.33	1,192,864
New England	**74,372.26**	**6.89**	**1,078,649**	**80,820.81**	**6.71**	**1,204,185**
New York	150,953.81	5.26	2,870,011	175,927.71	6.04	2,910,441
New Jersey	91,489.64	7.14	1,281,001	91,502.21	7.16	1,278,741
Pennsylvania	88,056.01	5.73	1,536,491	89,371.28	5.72	1,561,128
Middle Atlantic	**101,891.33**	**5.81**	**1,753,274**	**104,928.73**	**6.08**	**1,727,073**
Ohio	88,004.56	3.88	2,267,433	90,157.26	3.84	2,345,008
Indiana	91,254.60	4.45	2,050,483	103,037.84	4.40	2,340,038
Illinois	313,687.14	5.37	5,846,810	348,233.21	5.35	6,506,294
Michigan	143,129.37	5.53	2,589,724	148,907.79	5.54	2,687,794
Wisconsin	148,522.23	4.14	3,583,516	232,892.99	4.01	5,812,838
East North Central	**125,624.73**	**4.61**	**2,725,699**	**136,477.59**	**4.58**	**2,979,410**
Minnesota	110,616.78	4.16	2,661,739	128,416.24	4.07	3,156,696
Iowa	106,041.77	4.04	2,621,980	152,793.07	3.94	3,879,093
Missouri	55,695.92	5.09	1,093,394	59,842.46	5.19	1,153,126
North Dakota	45,667.25	5.02	909,981	37,835.89	4.98	759,075
South Dakota	46,534.33	4.47	1,041,517	95,054.37	4.63	2,052,163
Nebraska	52,859.63	4.13	1,279,270	—	—	—
Kansas	37,361.32	4.79	779,270	35,962.73	4.78	751,945
West North Central	**67,479.04**	**4.42**	**1,526,284**	**77,415.04**	**4.38**	**1,765,594**
Delaware	200,684.44	4.47	4,486,703	279,688.89	4.23	6,610,005
Maryland	83,668.54	4.73	1,768,938	84,720.64	4.72	1,794,163
District of Columbia	904,883.72	5.13	17,648,711	904,883.72	5.13	17,648,711
Virginia	141,961.64	4.19	3,387,847	167,527.40	4.12	4,067,273
West Virginia	34,980.09	3.59	974,666	35,001.22	3.59	975,458
North Carolina	101,345.55	4.85	2,087,797	115,820.76	4.75	2,439,887
South Carolina	235,205.12	4.26	5,527,469	225,966.40	4.43	5,095,275
Georgia	62,554.80	4.70	1,331,410	83,546.18	4.63	1,805,609
Florida	34,786.76	5.06	687,898	28,227.89	4.73	597,036
South Atlantic	**75,691.31**	**4.57**	**1,654,787**	**79,037.02**	**4.51**	**1,750,977**
Kentucky	167,190.17	5.74	2,910,670	77,986.69	3.65	2,139,057
Tennessee	89,682.61	4.63	1,935,343	158,279.88	3.36	4,714,047
Alabama	130,888.15	4.71	2,776,862	148,273.40	4.39	3,376,929
Mississippi	97,404.86	4.81	2,024,359	68,688.77	4.96	1,386,162
East South Central	**114,260.49**	**4.94**	**2,315,282**	**102,428.63**	**4.25**	**2,409,789**
Arkansas	22,609.12	4.87	463,808	18,326.59	5.15	355,570
Louisiana	72,625.73	4.27	1,699,969	79,267.97	4.18	1,898,276
Oklahoma	25,559.20	3.72	687,598	24,102.89	3.49	689,781
Texas	56,432.12	4.06	1,389,408	56,021.94	3.95	1,417,471
West South Central	**47,893.27**	**4.14**	**1,157,700**	**47,066.67**	**4.04**	**1,165,601**
Montana	54,018.53	3.09	1,747,841	30,940.15	3.30	936,281
Idaho	57,812.04	2.61	2,212,644	58,490.03	2.57	2,272,142
Wyoming	89,402.22	3.59	2,489,332	85,293.98	3.35	2,544,508
Colorado	209,219.12	4.45	4,703,379	824,682.04	4.45	18,521,160
New Mexico	50,157.10	5.35	937,821	38,702.78	5.07	763,898
Arizona	112,618.46	5.38	2,091,757	88,995.40	5.91	1,505,278
Utah	37,205.26	4.13	900,981	31,186.74	3.96	787,880
Nevada	378,930.22	4.42	8,579,809	353,310.74	4.98	7,101,519
Mountain	**78,243.81**	**4.12**	**1,898,052**	**64,192.26**	**4.11**	**1,563,114**
Washington	140,000.17	2.74	5,109,347	37,983.99	3.32	1,145,215
Oregon	171,353.65	3.32	5,156,479	136,976.29	3.80	3,607,056
California	109,981.25	7.08	1,553,789	535,210.19	7.20	7,438,303
Pacific	**118,239.87**	**5.10**	**2,320,061**	**288,596.84**	**6.37**	**4,531,367**
Alaska	61,398.91	6.59	932,111	21,722.58	8.78	247,495
Hawaii	352,008.81	6.62	5,318,816	352,008.81	6.62	5,318,816
Alaska & Hawaii	**226,864.61**	**6.61**	**3,429,786**	**232,817.20**	**6.67**	**3,488,709**

p Preliminary.

TABLE 69B

REVENUE AND USE PER INDUSTRIAL CUSTOMER

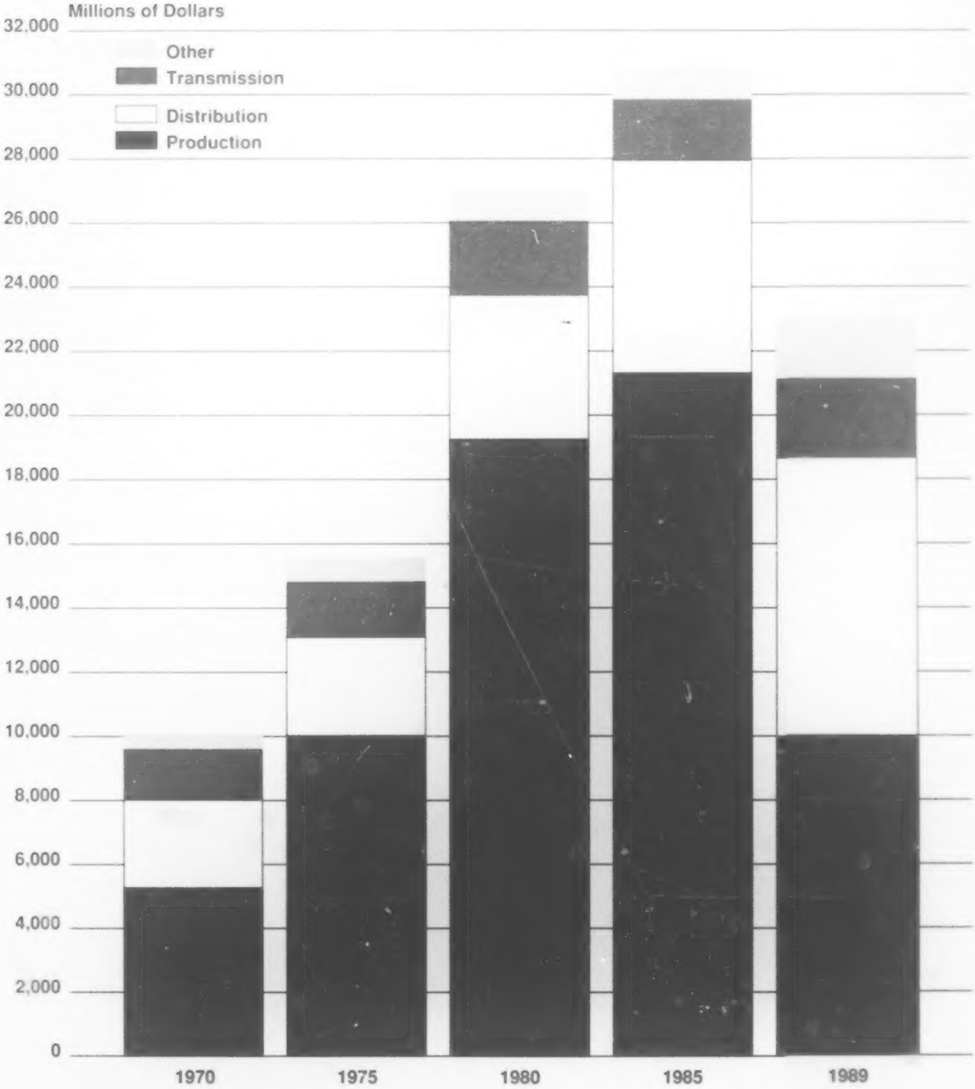
BY STATE—YEAR 1988r

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
State/Division	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 84,088.95**	**4.71¢**	**1,784,084**	**$ 88,899.76**	**4.77¢**	**1,862,303**
Maine	92,576.56	5.08	1,823,744	94,777.59	5.04	1,881,784
New Hampshire	137,795.00	7.06	1,951,258	139,514.59	7.08	1,970,369
Vermont	87,479.44	6.63	1,322,868	461,615.52	6.02	7,669,672
Massachusetts	53,909.38	6.79	794,273	64,119.38	6.35	1,009,141
Rhode Island	37,656.99	7.22	521,580	37,616.29	7.20	522,632
Connecticut	91,281.23	6.89	1,325,528	84,129.36	6.96	1,208,037
New England	**69,423.92**	**6.56**	**1,057,926**	**77,531.50**	**6.37**	**1,216,867**
New York	145,231.00	4.91	2,955,266	171,576.08	5.67	3,026,981
New Jersey	86,845.63	6.76	1,284,621	86,784.35	6.76	1,283,564
Pennsylvania	86,779.48	5.56	1,561,960	88,062.89	5.55	1,587,345
Middle Atlantic	**98,225.58**	**5.56**	**1,768,181**	**101,150.53**	**5.80**	**1,742,820**
Ohio	84,685.91	4.03	2,102,203	86,780.27	3.99	2,173,137
Indiana	93,043.06	4.59	2,024,975	105,322.95	4.56	2,311,631
Illinois	308,970.02	5.19	5,957,629	343,559.81	5.17	6,651,472
Michigan	141,849.20	5.35	2,648,990	147,435.25	5.35	2,753,679
Wisconsin	151,713.08	4.17	3,634,603	237,974.54	4.04	5,893,796
East North Central	**123,830.11**	**4.64**	**2,670,925**	**134,508.59**	**4.61**	**2,920,804**
Minnesota	116,337.06	4.24	2,745,018	135,867.49	4.16	3,265,937
Iowa	110,368.76	4.18	2,639,332	160,738.83	4.10	3,918,009
Missouri	50,261.68	5.10	985,367	58,661.26	5.16	1,136,195
North Dakota	34,359.41	5.26	653,094	37,308.29	5.07	736,329
South Dakota	44,140.29	4.36	1,012,762	91,488.12	4.51	2,029,654
Nebraska	49,879.92	3.88	1,286,250	—	—	—
Kansas	37,142.26	4.90	758,347	35,448.53	4.87	728,295
West North Central	**65,162.79**	**4.48**	**1,454,173**	**78,616.44**	**4.46**	**1,762,819**
Delaware	196,037.77	4.83	4,061,316	271,120.10	4.63	5,861,150
Maryland	134,568.84	4.43	3,037,224	140,114.98	4.42	3,171,704
District of Columbia	893,167.37	5.31	16,821,012	893,167.37	5.31	16,821,012
Virginia	134,174.86	4.05	3,313,838	156,077.96	3.95	3,946,667
West Virginia	34,352.18	3.61	952,637	34,371.88	3.61	953,378
North Carolina	98,310.72	4.81	2,042,487	112,294.06	4.70	2,390,277
South Carolina	234,982.97	4.20	5,591,372	226,566.66	4.48	5,058,240
Georgia	61,656.12	4.67	1,319,923	82,236.56	4.61	1,785,716
Florida	34,295.91	5.11	670,579	28,028.50	4.81	582,243
South Atlantic	**76,958.05**	**4.52**	**1,703,684**	**81,113.12**	**4.47**	**1,816,179**
Kentucky	141,216.36	4.97	2,839,807	78,152.35	3.72	2,101,632
Tennessee	90,011.22	4.67	1,926,373	168,645.07	3.50	4,822,596
Alabama	131,720.32	4.37	3,013,114	148,493.46	4.38	3,393,235
Mississippi	91,820.53	4.91	1,868,912	65,483.48	5.04	1,299,172
East South Central	**109,094.73**	**4.68**	**2,330,737**	**101,410.70**	**4.27**	**2,372,683**
Arkansas	21,095.40	4.83	436,444	17,313.88	4.99	346,690
Louisiana	66,078.16	4.20	1,572,989	71,538.85	4.10	1,744,867
Oklahoma	24,581.39	3.72	661,313	23,142.71	3.48	665,887
Texas	55,212.05	4.03	1,371,523	54,789.14	3.91	1,401,407
West South Central	**45,984.27**	**4.09**	**1,123,461**	**45,238.56**	**3.98**	**1,136,071**
Montana	48,273.93	3.16	1,527,613	26,926.36	3.38	797,739
Idaho	57,008.86	2.56	2,226,383	57,700.28	2.52	2,292,557
Wyoming	98,802.05	3.65	2,704,603	96,833.88	3.42	2,830,792
Colorado	188,957.38	4.41	4,285,600	798,235.48	4.33	18,420,509
New Mexico	50,454.18	5.43	928,411	38,322.01	5.17	741,553
Arizona	106,619.07	5.23	2,038,132	86,379.66	5.89	1,466,253
Utah	40,052.36	4.61	869,219	34,221.79	4.50	759,802
Nevada	344,011.76	4.43	7,762,023	323,962.21	5.04	6,422,016
Mountain	**75,844.53**	**4.16**	**1,823,723**	**62,398.59**	**4.18**	**1,492,244**
Washington	164,745.86	2.72	6,064,073	42,651.52	3.23	1,321,699
Oregon	187,150.74	3.34	5,600,853	155,966.00	3.78	4,121,292
California	106,613.19	6.87	1,552,742	546,228.47	7.01	7,793,216
Pacific	**118,776.51**	**5.00**	**2,377,857**	**312,410.52**	**6.22**	**5,020,042**
Alaska	48,865.51	6.50	751,839	17,925.44	7.48	239,722
Hawaii	327,159.31	6.21	5,268,967	327,159.31	6.21	5,268,967
Alaska & Hawaii	**209,131.85**	**6.24**	**3,353,203**	**214,980.43**	**6.24**	**3,444,538**

r Revised.

SECTION IX
FINANCIAL

CHART IX-A
CONSTRUCTION EXPENDITURES
INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 69, page 83

TABLE 70

CONSTRUCTION EXPENDITURES INVESTOR-OWNED ELECTRIC UTILITIES

BY TYPE OF PLANT
MILLIONS OF DOLLARS

	1989p	1988r	1987	1986	1985	1984	1983	1982	1981	1980	1979
Production											
Steam	$ 4,044	$ 3,946	$ 4,478	$ 4,333	$ 4,725	$ 5,569	$ 5,860	$ 7,828	$ 7,221	$ 7,498	$ 7,572
Nuclear	4,768	5,272	9,239	13,426	15,553	17,478	18,208	16,461	12,785	11,045	9,855
Other	1,091	740	678	724	1,095	893	868	1,050	906	695	854
Total	**9,903**	**9,959**	**14,395**	**18,483**	**21,372**	**23,939**	**24,935**	**25,339**	**20,912**	**19,238**	**18,281**
Transmission	2,512	1,942	2,066	1,761	1,863	2,250	2,371	2,203	2,270	2,353	2,090
Distribution	8,685	8,224	7,457	7,248	6,590	5,899	5,021	4,827	4,606	4,483	4,334
General/Miscellaneous*	1,997	1,725	1,585	1,808	1,266	1,355	1,489	1,233	1,336	937	776
Subtotal	**23,097**	**21,851**	**25,503**	**29,299**	**31,091**	**33,443**	**33,816**	**33,602**	**29,124**	**27,011**	**25,481**
Nuclear Fuel	1,663	1,780	1,532	1,724	2,202	1,842	1,749	1,748	1,566	1,324	1,338
GRAND TOTAL	**$24,760**	**$23,630**	**$27,035**	**$31,023**	**$33,294**	**$35,285**	**$35,565**	**$35,350**	**$30,690**	**$28,335**	**$26,819**
AFUDC included in TOTAL	$ 2,241	$ 2,711	$ 4,579	$ 5,659	$ 6,941	$ 7,923	$ 7,816	$ 6,612	$ 5,358	$ 4,365	$ 3,593

	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969
Production										
Steam	$ 6,664	$ 6,529	$ 5,689	$ 5,062	$ 5,323	$ 4,923	$ 4,306	$ 3,507	$ 2,790	$ 2,227
Nuclear	8,813	7,273	5,815	4,545	3,969	3,270	2,920	2,410	1,641	1,120
Other	655	614	460	487	802	662	691	620	818	550
Total	**16,132**	**14,416**	**11,964**	**10,094**	**10,094**	**8,855**	**7,917**	**6,537**	**5,249**	**3,897**
Transmission	1,738	1,687	1,832	1,771	2,145	1,878	1,749	1,818	1,625	1,555
Distribution	3,875	3,390	2,974	3,075	3,538	3,568	3,192	2,869	2,751	2,511
General/Miscellaneous*	1,192	788	590	710	880	758	605	633	422	394
Subtotal	**22,937**	**20,281**	**17,360**	**15,650**	**16,702**	**15,059**	**13,463**	**11,857**	**10,047**	**8,357**
Nuclear Fuel	1,093	1,016	798	541	490	232	265	361	217	N/A
GRAND TOTAL	**$24,030**	**$21,297**	**$18,158**	**$16,191**	**$17,192**	**$15,291**	**$13,728**	**$12,218**	**$10,264**	**$ 8,357**
AFUDC included in TOTAL	$ 2,717	$ 2,267	$ 1,854	$ 1,676	$ 1,576	$ 1,277	$ 1,078	$ 809	$ 583	$ 398

Note: Total may not equal sum of components due to independent rounding.
This table has been restructured based on data submitted to the Institute. Data, compiled on a 50 state basis, now includes nuclear fuel and reflects the amount of AFUDC in the total.
Construction expenditures are, in general, the gross amounts spent for construction of all kinds, including the acquisition of real estate and all necessary equipment.
The figures include money spent for replacements, additions, and betterments (but not for maintenance of existing plant) as well as for new construction.
**Includes intangible plant.*
p Preliminary   r Revised   N/A Not Available

TABLE 71

COMBINED BALANCE SHEETS—DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1989p	1988r	1987	1986	1985	1984
ASSETS						
Utility Plant:						
Electric	$433,958	$415,505	$387,154	$348,400	$317,392	$277,374
Other	23,666	22,266	21,886	21,698	18,954	18,219
Total Utility Plant	**457,624**	**437,771**	**409,039**	**370,097**	**336,345**	**295,592**
Accumulated Provision for Depreciation and Amortization	135,544	123,517	112,029	102,243	92,567	84,306
Net Utility Plant	**322,079**	**314,254**	**297,01[illegible]**	**267,854**	**243,778**	**211,285**
Construction Work in Progress	35,206	39,928	51,510	74,978	84,092	95,491
Nuclear Fuel	19,873	19,518	18,440	15,009	13,979	11,587
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	11,514	10,307	8,697	6,466	5,461	4,219
Net Nuclear Fuel	**8,359**	**9,211**	**9,744**	**8,543**	**8,518**	**7,368**
Net Total Utility Plant	**365,644**	**363,394**	**358,264**	**351,375**	**336,389**	**314,145**
Other Property and Investment	18,768	16,015	15,174	11,887	9,557	9,359
Total Current and Accrued Assets	43,840	41,275	41,515	38,824	40,427	37,823
Total Deferred Debits	33,404	27,780	24,916	21,635	16,194	18,065
Total Assets	**$461,657**	**$448,464**	**$439,869**	**$423,722**	**$402,567**	**$379,392**
CAPITALIZATION AND LIABILITIES						
Capitalization:						
Common Stock	$57,329	$ 58,351	$ 53,367	$ 51,658	$ 51,556	$ 47,842
Other Paid-In Capital Excluding Retained Earnings*	35,667	35,891	37,006	37,366	34,036	33,886
Retained Earnings	52,422	48,324	50,904	49,362	43,902	40,423
Total Common Shareholders' Equity	**145,419**	**142,567**	**141,277**	**138,386**	**129,495**	**122,151**
Preferred Stock	25,512	25,394	26,661	27,947	30,614	29,882
Long-Term Debt:						
Mortgage Bonds	119,361	118,711	115,358	115,370	111,763	108,997
Other Long-Term Debt	45,344	42,465	40,824	38,058	37,180	32,696
Total Long-Term Debt	**164,705**	**161,176**	**156,181**	**153,428**	**148,944**	**141,693**
Total Capitalization	**335,636**	**329,137**	**324,120**	**319,761**	**309,052**	**293,727**
Total Other Non-Current Liabilities	5,425	6,466	6,648	5,102	3,278	N/A
Total Current and Accrued Liabilities	46,081	44,469	44,715	40,419	38,718	36,851
Contribution in Aid of Construction	110	157	174	160	156	145
Deferred Income Taxes	45,588	43,178	39,535	35,465	29,853	26,438
Deferred Investment Tax Credits	15,952	16,552	16,983	16,760	15,931	14,136
Other Deferred Credits**	12,866	8,506	7,695	6,055	5,578	8,096
Total Capitalization and Liabilities	**$461,657**	**$448,464**	**$439,869**	**$423,722**	**$402,567**	**$379,392**

Note: Total may not equal sum of components due to independent rounding. Data for prior years do not reflect restatements. Data based on reports as submitted by electric utilities, some of which report on a consolidated basis.
Data comprising "Net Total Utility Plant" has been reformatted to reflect changes made to Schedule VI of the Uniform Statistical Report. Previous years' data have been revised for comparability.
N/A Not Applicable.
**Includes Premium on Common and Preferred Stock.*
***Data for 1984 includes Operating Reserves. Beginning 1985 "Total Other Non-Current Liabilities", which includes FERC System of Accounts 227, 228, and 229, is shown as a separate item.*
p Preliminary. r Revised.

TABLE 72

COMBINED INCOME STATEMENTS—DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1989p	1988r	1987	1986	1985	1984
	ELECTRIC DEPARTMENT ONLY					
Operating Revenues	**$140,883**	**$134,556**	**$129,437**	**$127,552**	**$125,547**	**$120,090**
Operating Expenses:						
Operation	66,200	63,269	59,693	57,975	61,109	59,679
Maintenance	11,267	10,913	10,304	9,688	9,191	8,482
Depreciation and Depletion	14,151	13,325	12,064	10,623	9,736	8,792
Amortization Charged to Operation	1,166	368	254	130	196	139
Property Losses Charged to Operation	312	399	396	412	370	318
Deferred Expenses	(727)	(930)	(1,110)	N/A	N/A	N/A
Taxes Other Than Income Taxes	10,823	10,362	9,766	9,390	8,902	8,507
Federal Income Taxes	6,070	4,952	5,884	5,877	4,637	3,857
State Income Taxes	970	873	827	807	712	705
Deferred Income Taxes:						
Property Related	2,193	3,409	4,314	4,899	4,069	3,283
Non-Property Related	(777)	(975)	(551)	352	464	1,418
Investment Tax Credit Adjustments	(291)	(200)	588	1,209	1,964	2,113
Total Operating Expenses	**111,360**	**105,765**	**102,429**	**101,360**	**101,350**	**97,294**
Operating Income	$ 29,523	$ 28,790	$ 27,008	$ 26,191	$ 24,197	$ 22,796
	ALL DEPARTMENTS					
Operating Revenues	**$157,757**	**$150,733**	**$144,569**	**$144,939**	**$144,642**	**$139,499**
Operating Expenses:						
Operation	78,685	75,264	71,018	71,075	75,931	74,787
Maintenance	11,792	11,429	10,795	10,189	9,666	8,932
Depreciation and Depletion	15,038	14,143	12,848	11,416	10,447	9,476
Amortization Charged to Operation	1,342	531	350	274	295	228
Property Losses Charged to Operation	333	413	423	452	382	339
Deferred Expenses	(729)	(936)	(1,117)	N/A	N/A	N/A
Taxes Other Than Income Taxes	11,814	11,300	10,701	10,372	9,880	9,477
Federal Income Taxes	6,249	5,219	6,144	6,122	5,000	4,363
State Income Taxes	1,032	927	871	843	796	806
Deferred Income Taxes:						
Property Related	2,418	3,597	4,455	5,062	4,209	3,351
Non-Property Related	(833)	(1,071)	(569)	446	483	1,345
Investment Tax Credit Adjustments	(303)	(211)	575	1,244	2,027	2,218
Total Operating Expenses	**126,835**	**120,603**	**116,492**	**117,494**	**119,115**	**115,325**
Operating Income	30,921	30,130	28,077	27,444	25,530	24,174
Other Income (Non-Operating), Net	506	(40)	1,510	2,459	2,313	2,135
Allowance for Other Funds Used During Construction	1,256	1,556	3,190	4,189	5,098	5,155
Income Before Interest Charges (Gross Income)	**32,683**	**31,646**	**32,777**	**34,093**	**32,942**	**31,465**
Interest Charges:						
Interest on Long-Term Debt	14,791	14,418	14,317	14,711	14,470	13,540
Interest on Short-Term Debt	576	572	492	372	504	595
Amortization of Debt Discount, Expense and Premium	292	275	229	193	131	98
Other Interest Expense	457	418	392	553	465	600
Allowance for Borrowed Funds Used During Construction—Credit	(1,114)	(1,235)	(1,824)	(2,286)	(2,777)	(3,061)
Net Interest Charges	15,002	14,448	13,605	13,544	12,794	11,771
Income Before Extraordinary Items	**17,682**	**17,198**	**19,172**	**20,549**	**20,148**	**19,694**
Extraordinary Items	(137)*	(1,431)*	(1,127)*	(308)	(1,659)	(22)
Net Income	**17,544**	**15,766**	**18,045**	**20,241**	**18,489**	**19,672**
Preferred Dividend Charges	2,363	2,008	2,306	2,747	2,877	2,828
Available for Common Stock	**15,182**	**13,758**	**15,739**	**17,494**	**15,613**	**16,844**
Common Dividends	13,198	12,967	12,668	12,303	11,782	11,077
Net Income After Dividends	**$ 1,984**	**$ 791**	**$ 3,071**	**$ 5,190**	**$ 3,830**	**$ 5,767**

Note: Total may not equal sum of components due to independent rounding. See page 86 for footnote.
Deferred Income Taxes now shown as "Property Related" (previously shown as "Due to Liberalized Depreciation" and "Due to Accelerated Amortization") and "Non-Property Related" (previously shown as "Other Deferred Income Taxes").
*p Preliminary. r Revised. ( ) Denotes credit or negative value. N/A Not Applicable. * Includes Cumulative Effects of a change in accounting principle.*

TABLE 73

DETAIL OF ELECTRIC OPERATION & MAINTENANCE EXPENSES INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1989p	1988r	1987	1986	1985	1984
Production	$56,503	$53,884	$50,583	$49,254	$53,068	$52,288
Transmission and Distribution	7,048	6,829	6,602	6,251	6,005	5,614
Customer Accounts	2,997	2,871	2,836	2,723	2,537	2,383
Customer Service and Information	960	892	855	826	760	745
Sales	202	175	140	93	65	47
Administrative and General	9,757	9,530	8,982	8,514	7,865	7,084
Total Operation & Maintenance Expenses	**$77,467**	**$74,181**	**$69,998**	**$67,663**	**$70,300**	**$68,161**
Cost of Fuel*	$32,473	$31,421	$31,042	$31,195	$36,635	$37,697

Note: Total may not equal sum of components due to independent rounding.
**Included in "Total Operation & Maintenance Expenses."*
p Preliminary. r Revised.

TABLE 74

DETAIL OF TAXES—ELECTRIC DEPARTMENT ONLY INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1989p		1988r		1987	
	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue
Federal Taxes						
Income	$ 6,070	4.3%	$ 4,952	3.7%	$ 5,884	4.5%
Deferred Taxes on Income*	1,951	1.4	3,181	2.4	4,116	3.2
Other Deferred Income Taxes**	(1,007)	N/A	(1,046)	N/A	(8)	N/A
Miscellaneous Taxes	1,097	0.8	1,057	0.8	918	0.7
Total Federal Taxes Charged to Income	8,112	6.5	8,144	6.9	10,911	8.4
State and Local Taxes	10,877	7.7	10,278	7.6	9,919	7.7
Total Taxes Charged to Income	**$18,989**	**14.2%**	**$18,422**	**14.5%**	**$20,829**	**16.1%**

	1986		1985		1984	
	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue
Federal Taxes						
Income	$ 5,877	4.6%	$ 4,637	3.7%	$ 3,857	3.2%
Deferred Taxes on Income*	4,610	3.6	3,810	3.0	3,094	2.6
Other Deferred Income Taxes**	1,458	1.2	2,428	1.9	3,417	2.8
Miscellaneous Taxes	895	0.7	818	0.7	777	0.6
Total Federal Taxes Charged to Income	12,841	10.1	11,693	9.3	11,145	9.3
State and Local Taxes	9,694	7.6	9,055	7.2	8,740	7.3
Total Taxes Charged to Income	**$22,534**	**17.7%**	**$20,748**	**16.5%**	**$19,884**	**16.6%**

Note: Total may not equal sum of components due to independent rounding.
**Due to liberalized depreciation and accelerated amortization.*
***Includes investment tax credits reported as charges to income for the current year.*
p Preliminary. r Revised. ( ) Denotes negative value. N/A Not applicable.

TABLE 75

CAPITALIZATION AND CAPITALIZATION RATIOS INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1989p	1988r	1987	1986	1985	1984
CAPITALIZATION OUTSTANDING						
Mortgage Bonds	$119,361	$118,711	$115,358	$115,370	$111,763	$108,997
Other Long-Term Debt	45,344	42,465	40,824	38,058	37,180	32,696
Total Long-Term Debt	**164,705**	**161,176**	**156,181**	**153,428**	**148,944**	**141,693**
Preferred Stock	25,512	25,394	26,661	27,947	30,614	29,882
Common Stock	57,329	58,351	53,367	51,658	51,556	47,842
Other Paid-In Capital Excluding Retained Earnings*	35,667	35,891	37,006	37,366	34,036	33,886
Retained Earnings	52,422	48,324	50,904	49,362	43,902	40,423
Total Capitalization	**$335,636**	**$329,137**	**$324,120**	**$319,761**	**$309,052**	**$293,727**
CAPITALIZATION RATIOS						
Mortgage Bonds	35.6%	36.1%	35.6%	36.1%	36.2%	37.1%
Other Long-Term Debt	13.5	12.9	12.6	11.9	12.0	11.1
Total Long-Term Debt	**49.1**	**49.0**	**48.2**	**48.0**	**48.2**	**48.2**
Preferred Stock	7.6	7.7	8.2	8.7	9.9	10.2
Common Shareholders' Equity	43.3	43.3	43.6	43.3	41.9	41.6
Total Capitalization	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note: Total may not equal sum of components due to independent rounding.

**Includes Premium on Common and Preferred Stock.*

p Preliminary. r Revised.

TABLE 76

STATEMENT OF CASH FLOWS
INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1989p
Operating Activities:	
Net Income	**$ 17,585**
Noncash Items Included in Net Income:	
Depreciation, Depletion and Amortization	17,985
Deferred Income Taxes (Net)	1,137
Allowance for Funds Used During Construction (Equity)	(1,335)
Other	(102)
Changes in Working Capital:	
Materials and Supplies, Fuel Inventories, Gas in Storage	(409)
Accounts Receivable (Net)	(1,257)
Other Current Assets	(654)
Accrued Taxes	963
Accounts Payable and Other Current Liabilities	3,312
Net Cash Provided By (Used For) Operating Activities	**$ 37,225**
Investing Activities:	
Construction Expenditures (excl. AFUDC-Equity)	$(25,348)
Purchase of Other Investments	(1,708)
Sale of Other Investments	911
Other	969
Net Cash Provided By (Used For) Investing Activities	**$(25,176)**
Financing Activities:	
Issuance of Common Stock (Net Proceeds)	$ 1,936
Issuance of Preferred/Preference Stock (Net Proceeds)	637
Redemption of Preferred/Preference Stock (Net Payments)	(1,404)
Redemption of Long-Term Debt (Net Proceeds)	(15,087)
Common Stock Dividends	(13,202)
Preferred/Preference Stock Dividends	(1,988)
Issuance of Long-Term Debt (Net Proceeds)	17,350
Increase (Decrease) in Short-Term Debt (Net)	165
Other Financing	(737)
Net Cash Provided By (Used For) Financing Activities	**$(12,328)**
Net Increase (Decrease) in Cash and Cash Equivalents	**$ (279)**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
( ) Denotes negative value.

TABLE 77

PUBLIC UTILITY LONG-TERM FINANCING
INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR, TYPE OF ISSUE, PURPOSE AND TYPE OF UTILITY
1984-1989—THOUSANDS OF DOLLARS

	1989	1988	1987	1986	1985	1984
ELECTRIC UTILITIES						
LONG-TERM DEBT						
New Capital	$ 8,337,462	$ 6,800,152	$ 8,687,727	$10,344,120	$ 9,188,802	$ 9,360,990
Refunding	2,656,750	3,100,730	5,238,655	11,047,010	3,328,435	812,500
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**10,994,212**	**9,900,882**	**13,926,382**	**21,391,130**	**12,517,237**	**10,173,490**
PREFERRED STOCK						
New Capital	350,000	552,000	1,205,000	985,000	655,000	888,000
Refunding	370,000	195,500	753,000	695,600	–	–
Divestment	–	–	–	–	–	–
Total Preferred	**720,000**	**747,500**	**1,958,000**	**1,680,600**	**655,000**	**888,000**
COMMON STOCK						
New Capital	771,981	502,713	245,750	605,945	1,578,763	861,633
Refunding	–	–	–	33,750	71,250	68,500
Divestment	–	–	–	–	–	–
Total Common	**771,981**	**502,713**	**245,750**	**639,695**	**1,650,013**	**930,133**
TOTAL CAPITAL						
New Capital	9,459,443	7,854,865	10,138,477	11,935,065	11,422,565	11,110,623
Refunding	3,026,750	3,296,230	5,991,655	11,776,360	3,399,685	881,000
Divestment	–	–	–	–	–	–
Total Capital	**$12,486,193**	**$11,151,095**	**$16,130,132**	**$23,711,425**	**$14,822,250**	**$11,991,623**
GAS UTILITIES*						
LONG-TERM DEBT						
New Capital	$ 1,286,365	$ 2,565,995	$ 2,875,301	$ 2,768,600	$ 1,382,240	$ 755,000
Refunding	311,135	334,200	392,659	1,111,900	203,510	50,000
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**1,597,500**	**2,900,195**	**3,267,960**	**3,880,500**	**1,585,750**	**805,000**
PREFERRED STOCK						
New Capital	65,000	15,000	251,125	–	–	100,000
Refunding	–	–	155,000	–	100,000	–
Divestment	–	–	–	–	–	–
Total Preferred	**65,000**	**15,000**	**406,125**	**–**	**100,000**	**100,000**
COMMON STOCK						
New Capital	334,486	212,936	93,744	224,269	44,375	78,263
Refunding	–	–	14,000	–	–	16,591
Divestment	–	–	–	–	–	–
Total Common	**334,486**	**212,936**	**107,744**	**224,269**	**44,375**	**94,854**
TOTAL CAPITAL						
New Capital	1,685,851	2,793,931	3,220,170	2,992,869	1,426,615	933,263
Refunding	311,135	334,200	561,659	1,111,900	303,510	66,591
Divestment	–	–	–	–	–	–
Total Capital	**$ 1,996,986**	**$ 3,128,131**	**$ 3,781,829**	**$ 4,104,769**	**$ 1,730,125**	**$ 999,854**
ALL OTHER UTILITIES†						
LONG-TERM DEBT						
New Capital	$ 887,428	$ 246,200	$ 1,057,246	$ 1,375,618	$ 851,750	$ 150,000
Refunding	987,072	–	365,000	7,950,382	2,560,000	310,000
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**1,874,500**	**246,200**	**1,422,246**	**9,326,000**	**3,411,750**	**460,000**
PREFERRED STOCK						
New Capital	–	60,000	–	–	–	–
Refunding	–	–	–	–	–	–
Divestment	–	–	–	–	–	–
Total Preferred	**–**	**60,000**	**–**	**–**	**–**	**–**
COMMON STOCK						
New Capital	80,500	15,600	4,840	101,086	475,100	–
Refunding	–	–	–	–	–	–
Divestment	–	–	–	–	–	–
Total Common	**80,500**	**15,600**	**4,840**	**101,086**	**475,100**	**–**
TOTAL CAPITAL						
New Capital	967,928	321,800	1,062,086	1,476,704	1,326,850	150,000
Refunding	987,072	–	365,000	7,950,382	2,560,000	310,000
Divestment	–	–	–	–	–	–
Total Capital	**$ 1,955,000**	**$ 321,800**	**$ 1,427,086**	**$ 9,427,086**	**$ 3,886,850**	**$ 460,000**
TOTAL UTILITY FINANCING						
LONG-TERM DEBT						
New Capital	$10,511,255	$ 9,612,347	$12,620,274	$14,488,338	$11,422,792	$10,265,990
Refunding	3,954,957	3,434,930	5,996,314	20,109,292	6,091,945	1,172,500
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**14,466,212**	**13,047,277**	**18,616,588**	**34,597,630**	**17,514,737**	**11,438,490**
PREFERRED STOCK						
New Capital	415,000	627,000	1,456,125	985,000	655,000	988,000
Refunding	370,000	195,500	908,000	695,600	100,000	–
Divestment	–	–	–	–	–	–
Total Preferred	**785,000**	**822,500**	**2,364,125**	**1,680,600**	**755,000**	**988,000**
COMMON STOCK						
New Capital	1,186,967	731,249	344,334	931,300	2,098,238	939,896
Refunding	–	–	14,000	33,750	71,250	85,091
Divestment	–	–	–	–	–	–
Total Common	**1,186,967**	**731,249**	**358,334**	**965,050**	**2,169,488**	**1,024,987**
TOTAL CAPITAL						
New Capital	12,113,222	10,970,596	14,420,733	16,404,638	14,176,030	12,193,886
Refunding	4,324,957	3,630,430	6,918,314	20,838,642	6,263,195	1,257,591
Divestment	–	–	–	–	–	–
Total Capital	**$16,438,179**	**$14,601,026**	**$21,339,047**	**$37,243,280**	**$20,439,225**	**$13,451,477**

Classification as to type of utility is based upon predominant source of revenue. **Includes gas pipe line companies.*

† "Other Utilities" are water, transit, telephone and telegraph, and does not include railroads.

Note: Includes negotiated sales of pollution control bonds: 1989, $1,499 million; 1988, $1,189 million; 1987, $1,970 million; 1986, $1,570 million; 1985, $6,071 million; and 1984, $4,400 million.

Source: Ebasco Business Consulting Company.

TABLE 78

WEIGHTED AVERAGE OF YIELDS ON NEWLY ISSUED DOMESTIC BONDS AND PREFERRED STOCKS

1969-1989

Year	Utility Bonds					Preferred Stocks
	Electric and Gas	Telephone	Water Works	All Utilities	Industrial Bonds	All Utilities
1989	**9.92%**	**8.68%**	**....%**	**9.73%**	**9.51%**	**9.24%**
1988	10.03	10.05	10.15	10.19	9.94	7.38
1987	9.74	9.63	....	9.75	9.29	7.83
1986	9.61	8.96	....	9.45	9.38	8.26
1985	11.83	11.54	11.18	11.78	11.64	10.08
1984	14.25	12.73	....	13.33	12.58	13.16
1983	12.70	11.72	....	12.53	11.50	12.06
1982	14.93	14.23	....	14.56	13.65	14.42
1981	16.31	15.45	....	16.30	15.16	15.11
1980	13.46	12.59	....	13.09	11.66	12.28
1979	10.85	10.29	....	10.64	9.49	9.76
1978	9.30	9.07	....	9.22	8.98	9.03
1977	8.43	8.21	....	8.38	8.15	8.43
1976	8.92	8.41	....	8.80	8.61	9.12
1975	9.97	9.27	....	9.76	9.12	10.63
1974	9.59	9.22	....	9.21	8.87	9.95
1973	7.91	7.87	...	7.88	7.86	7.50
1972	7.50	7.36	....	7.46	7.51	7.53
1971	7.72	7.58	....	7.71	7.80	7.74
1970	8.79	8.75	....	8.85	8.86	9.01
1969	7.93	8.00	....	7.99	7.84	7.75

Source: Moody's Investors Service.

TABLE 79

MOODY'S AVERAGE YIELDS ON UTILITY BONDS AND STOCKS

BY MOODY'S BOND RATINGS AND STOCK QUALITY GROUPS

1979-1989

	BONDS					PREFERRED STOCKS			COMMON STOCKS					
		Rating							High Quality		Good Quality		Medium Quality	
End of Month	Over-all* Average	Aaa**	Aa	A	Baa	aa High Quality	a Good Quality	baa Medium Quality	Yield	E/P Ratio†	Yield	E/P Ratio†	Yield	E/P Ratio†
1989														
December	9.33%	8.93%	9.29%	9.46%	9.62%	8.88%	9.25%	9.38%	5.83%	8.69%	6.57%	8.79%	7.68%	8.19%
September	9.48	9.15	9.42	9.59	9.77	8.91	9.43	9.73	6.47	9.00	7.06	8.05	8.01	9.11
June	9.36	9.01	9.26	9.53	9.64	8.93	9.37	9.73	6.41	9.15	7.25	7.79	8.14	9.77
March	10.21	9.96	10.06	10.27	10.54	9.54	10.11	10.38	7.06	10.21	7.98	8.50	9.13	10.87
1988														
December	10.09	9.74	9.97	10.16	10.47	9.50	10.06	10.37	6.58	10.35	7.45	7.81	8.87	10.48
September	10.06	9.80	9.91	10.14	10.40	9.40	9.89	10.17	6.67	10.32	7.26	9.47	9.02	10.71
June	10.70	10.25	10.50	10.78	11.25	9.28	9.89	10.09	6.58	9.89	8.12	9.57	9.19	11.15
March	10.36	9.93	10.16	10.33	11.02	9.06	9.74	10.04	6.68	10.28	8.29	10.10	9.38	12.19
1987														
December	10.91	10.55	10.65	10.94	11.49	9.35	10.24	10.45	6.68	10.38	8.60	9.60	9.54	12.06
September	11.22	10.75	10.84	11.42	11.87	9.40	10.19	10.47	6.28	10.06	7.97	9.55	8.60	12.06
June	9.86	9.39	9.55	10.02	10.46	8.66	9.13	9.75	6.23	9.58	7.81	10.03	8.57	11.14
March	8.89	8.38	8.77	9.04	9.38	7.82	8.36	8.90	6.00	9.24	6.99	8.94	7.89	10.94
1986														
December	9.00	8.46	8.85	9.14	9.54	7.98	8.64	9.27	5.48	7.53	6.91	9.28	7.96	10.92
September	9.39	8.88	9.26	9.48	9.95	8.09	8.76	9.36	5.49	7.46	6.97	9.55	8.15	11.48
June	9.16	8.67	9.05	9.23	9.70	8.54	9.32	9.89	5.57	7.55	7.23	9.64	8.24	11.21
March	8.93	8.30	8.75	9.06	9.60	8.61	9.05	9.78	6.07	8.32	7.16	9.84	9.01	11.17
1985														
December	10.56	9.99	10.30	10.75	11.19	10.00	10.28	11.09	7.34	11.66	8.40	11.67	9.60	13.57
September	11.95	11.29	11.73	12.07	12.69	10.60	11.05	12.52	8.36	13.30	9.74	13.66	10.88	15.63
June	11.93	11.16	11.60	12.16	12.81	10.25	10.83	11.97	7.46	11.83	8.59	12.22	9.48	13.78
March	13.59	12.90	13.45	13.86	14.13	11.62	12.32	12.98	8.13	13.32	9.15	13.33	10.48	15.12
1984														
December	12.96	12.54	12.79	13.02	13.49	12.25	12.97	13.71	8.26	14.10	9.65	13.73	10.96	15.60
September	13.95	...	13.38	14.13	14.35	12.31	13.31	14.28	8.64	14.86	10.43	14.48	11.90	16.97
June	15.32	...	14.96	15.25	15.76	13.28	14.22	14.85	9.85	17.01	11.51	15.88	13.34	18.84
March	14.16	...	13.78	14.04	14.66	12.40	13.12	13.55	9.65	16.89	11.37	15.64	12.81	18.77
1983														
December	13.46	12.96	13.15	13.50	14.22	12.18	12.61	13.34	8.83	15.32	10.43	13.95	11.97	17.04
September	13.20	12.66	12.87	13.27	13.98	11.70	12.15	12.72	9.03	15.26	10.17	14.00	10.86	14.94
June	13.13	12.32	12.63	13.54	14.04	11.34	12.05	12.47	9.37	15.11	10.75	14.29	10.84	14.29
March	13.26	12.23	12.66	13.82	14.34	11.17	11.79	12.51	9.35	14.77	10.19	14.14	11.13	14.41
1982														
December	13.50	12.30	12.68	14.37	14.65	11.63	12.20	13.26	9.22	15.20	10.56	14.77	11.43	14.79
September	14.39	12.97	13.76	15.31	15.52	12.84	13.49	14.11	9.64	15.91	11.30	15.78	12.15	16.17
June	16.37	15.55	16.04	16.56	17.32	14.30	14.69	15.67	10.08	14.13	11.96	15.95	13.03	17.33
March	16.19	15.15	15.62	16.64	17.35	14.44	14.81	15.48	10.09	16.74	11.53	15.96	12.74	16.72
1981														
December	16.23	14.88	15.90	16.68	17.45	14.97	15.47	15.83	11.01	16.19	11.72	14.43	13.53	17.58
September	17.56	16.74	17.43	17.84	18.21	14.68	15.28	16.01	11.52	16.74	12.01	14.73	13.96	18.07
June	15.49	14.47	15.06	15.84	16.60	13.75	14.15	15.02	10.94	15.78	11.70	14.05	12.88	16.95
March	14.86	13.96	14.61	15.17	15.69	13.35	13.72	14.57	11.71	16.51	12.20	15.21	13.30	17.63
1980														
December	14.11	13.18	13.91	14.14	15.20	13.15	14.01	14.56	11.49	15.65	12.36	16.86	13.27	17.01
September	13.68	12.91	13.49	13.74	14.58	12.02	12.92	13.76	11.37	15.46	11.83	16.01	12.77	15.71
June	12.04	11.30	11.84	12.22	12.81	10.59	10.97	12.05	10.24	13.41	10.65	14.36	11.52	13.22
March	14.57	13.35	14.57	14.96	15.41	13.09	14.74	15.22	12.15	15.50	12.52	18.27	13.93	19.11
1979														
December	11.85	11.09	11.62	11.97	12.71	10.86	11.49	12.75	10.57	15.89	11.00	15.61	12.23	14.86
September	10.39	9.75	10.10	10.62	11.08	9.60	10.34	10.97	9.81	14.82	10.37	15.29	10.92	13.71
June	9.90	9.39	9.73	10.04	10.45	9.03	9.55	10.49	9.18	13.87	9.83	14.24	10.31	12.93
March	10.02	9.60	9.90	10.06	10.51	9.10	9.63	10.33	9.13	13.73	9.66	14.16	10.04	13.044

Note: Yields shown under preferred stocks and common stocks represent averages of ten companies in each quality group.

**Average yield for selected utility bonds in each of the four top quality ratings shown.*

***The Aaa public utility average was suspended January 17, 1984, because of a lack of appropriate issues and reinstated on October 12. The 1984 high and low for the Average Utility and the Aaa Utility, were determined when a Aaa Utility was available.*

† Ratio in percent is obtained by dividing earnings per share by market price per share.

Source: Moody's Investors Service.

TABLE 80

MOODY'S 24 UTILITY COMMON STOCKS END-OF-MONTH AVERAGES

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
MARKET PRICE—WEIGHTED AVERAGE—$ PER SHARE													
1990	...	**116.90**	**116.81**	**115.40**	**107.68**	**111.55**	**112.50**	**113.38**	**104.94**	...	...	...	...
1989	110.31	103.23	99.81	98.64	102.49	106.80	111.25	117.12	113.70	113.73	116.28	119.35	122.52
1988	97.67	102.86	100.38	95.22	91.65	95.42	96.88	96.51	96.27	98.81	101.32	99.67	100.94
1987	106.26	123.06	118.35	113.48	107.10	103.30	105.83	102.44	105.66	102.59	98.39	96.30	94.24
1986	111.11	97.44	106.11	109.01	102.23	104.88	109.23	117.40	125.66	112.15	117.57	117.99	113.66
1985	87.08	80.47	81.05	83.66	85.91	89.32	92.81	87.22	89.43	83.59	88.10	90.39	94.98
DIVIDEND RATE—WEIGHTED AVERAGE—$ PER SHARE													
1990	...	**8.99**	**9.03**	**9.03**	**8.70**	**8.69**	**8.72**	**8.72**	**8.72**	...	...	...	...
1989	8.82	8.76	8.78	8.78	8.80	8.81	8.84	8.84	8.84	8.84	8.84	8.85	8.85
1988	8.87	9.17	9.17	8.95	8.98	8.99	9.03	8.69	8.69	8.69	8.69	8.69	8.71
1987	9.12	9.09	9.09	9.09	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	9.12
1986	8.89	8.80	8.80	8.80	8.84	8.89	8.89	8.94	8.94	8.94	8.95	8.96	8.97
1985	8.61	8.44	8.46	8.48	8.52	8.61	8.66	8.66	8.66	8.69	8.69	8.70	8.71
YIELD—%													
1990	...	**7.69**	**7.73**	**7.83**	**8.08**	**7.79**	**7.75**	**7.69**	**8.31**	...	...	...	...
1989	8.00	8.49	8.80	8.90	8.59	8.25	7.95	7.55	7.77	7.77	7.60	7.42	7.22
1988	9.08	8.92	9.14	9.40	9.80	9.42	9.32	9.00	9.03	8.79	8.58	8.72	8.63
1987	8.58	7.39	7.68	8.01	8.50	8.88	8.63	8.91	8.64	8.91	9.29	9.49	9.68
1986	8.00	9.03	8.29	8.07	8.65	8.48	8.14	7.61	7.11	7.97	7.61	7.59	7.89
1985	9.89	10.49	10.44	10.14	9.92	9.64	9.33	9.93	9.68	10.40	9.86	9.62	9.17

EARNINGS—WEIGHTED AVERAGE—$ PER SHARE				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1990	...	...	...	...
1989	7.97	8.22	8.54	11.07
1988	11.27	10.70	10.60	7.55
1987	12.86	12.63	12.36	11.45
1986	12.40	12.72	13.17	13.13
1985	12.66	12.65	12.67	12.53

Note: Quarterly earnings are for the 12 months ended March 31, June 30, September 30 and December 31.
Source: Moody's Investors Service.

SECTION X

ECONOMICS AND OTHER

TABLE 82

CONSUMER PRICE INDEX, 1966-1989

1982-84 EQUALS 100

Year	All Items		Food and Beverages		Housing	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1989*	**124.0**	**4.8**	**124.9**	**5.7**	**123.0**	**3.8**
1988*	118.3	4.1	118.2	4.1	118.5	3.8
1987*	113.6	3.6	113.5	4.0	114.2	3.0
1986*	109.6	1.9	109.1	3.3	110.9	3.0
1985*	107.6	3.6	105.6	2.3	107.7	4.0
1984*	103.9	4.3	103.2	3.7	103.6	4.1
1983*	99.6	3.2	99.5	2.3	99.5	2.7
1982*	96.5	6.2	97.3	4.1	96.9	7.2
1981*	90.9	10.3	93.5	7.8	90.4	11.5
1980*	82.4	13.5	86.7	8.5	81.1	15.7
1979*	72.6	11.3	79.9	10.7	70.1	12.3
1978*	65.2	7.6	72.2	9.7	62.4	8.7
1977	60.6	6.5	65.8	6.0	57.4	6.7
1976	56.9	5.8	62.1	3.2	53.8	6.1
1975	53.8	9.1	60.2	8.5	50.7	10.7
1974	49.3	11.0	55.5	13.7	45.8	11.2
1973	44.4	6.2	48.8	13.2	41.2	4.6
1972	41.8	3.2	43.1	4.1	39.4	3.7
1971	40.5	4.4	41.4	3.2	38.0	4.4
1970	38.8	5.7	40.1	5.2	36.4	7.1
1969	36.7	5.5	38.1	5.2	34.0	6.3
1968	34.8	4.2	36.2	3.4	32.0	3.9
1967	33.4	3.1	35.0	—	30.8	—
1966	32.4	2.9	—	—	—	—

Year	Transportation		Gas and Electricity		Electricity	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1989*	**114.1**	**5.0**	**107.5**	**2.8**	**114.7**	**2.9**
1988*	108.7	3.1	104.6	0.8	111.5	1.4
1987*	105.4	3.0	103.8	(1.8)	110.0	(0.4)
1986*	102.3	(3.9)	105.7	(1.3)	110.4	1.4
1985*	106.4	2.6	107.1	1.6	108.9	3.4
1984*	103.7	4.4	105.4	3.8	105.3	6.5
1983*	99.3	2.4	101.5	8.9	98.9	3.2
1982*	97.0	4.1	93.2	13.8	95.8	9.9
1981*	93.2	12.2	81.9	14.7	87.2	15.0
1980*	83.1	17.9	71.4	17.0	75.8	15.5
1979*	70.5	14.3	61.0	10.9	65.6	7.7
1978*	61.7	4.6	55.0	8.9	60.9	7.6
1977	59.0	7.1	50.5	13.0	56.6	6.6
1976	55.1	10.0	44.7	11.5	53.1	6.2
1975	50.1	9.4	40.1	16.2	50.0	13.4
1974	45.8	11.2	34.5	15.4	44.1	17.9
1973	41.2	3.3	29.9	4.9	37.4	5.1
1972	39.9	1.0	28.5	5.2	35.6	5.0
1971	39.5	5.3	27.1	6.7	33.9	6.6
1970	37.5	5.0	25.4	4.5	31.8	3.2
1969	35.7	4.1	24.3	1.7	30.8	2.0
1968	34.3	3.0	23.9	0.8	30.2	1.0
1967	33.3	3.1	23.7	0.4	29.9	0.7
1966	32.3	1.3	23.6	0.4	29.7	0.0

**Data beginning 1978 are for All Urban Consumers; earlier data are for Urban Wage Earners and Clerical Workers.*

Source: U.S. Department of Labor. Bureau of Labor Statistics. CPI Detailed Report *and* Monthly Labor Review.

TABLE 83

PRODUCER PRICE INDEX — FINISHED GOODS AND SELECTED INDUSTRIAL COMMODITIES

1982 EQUALS 100

	Finished Goods		Metals and Metal Products		Machinery and Equipment		Furniture and Household Durables		Fuels and Related Products and Power	
Year	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1989	**113.5**	**5.1**	**124.1**	**4.5**	**117.4**	**3.7**	**116.9**	**3.4**	**72.9**	**9.3**
1988	108.0	2.5	118.7	10.8	113.2	2.5	113.1	2.9	66.7	(5.0)
1987	105.4	2.1	107.1	3.8	110.4	1.5	109.9	1.6	70.2	0.6
1986	103.2	(1.4)	103.2	(1.1)	108.8	1.5	108.2	1.0	69.8	(23.6)
1985	104.7	1.0	104.4	(0.4)	107.2	2.0	107.1	1.3	91.4	(3.6)
1984	103.7	2.1	104.8	2.9	105.1	2.3	105.7	2.2	94.8	(1.1)
1983	101.6	1.6	101.8	1.8	102.7	2.7	103.4	3.4	95.9	(4.1)
1982	100.0	4.1	100.0	0.4	100.0	5.9	100.0	4.3	100.0	(0.2)
1981	96.1	9.2	99.6	4.8	94.4	9.8	95.9	5.7	100.2	21.0
1980	88.0	13.4	95.0	10.5	86.0	12.1	90.7	9.5	82.8	40.6
1979	77.6	11.2	86.0	14.2	76.7	9.1	82.8	6.8	58.9	26.7
1978	69.8	7.9	75.3	8.7	70.3	7.8	77.5	5.9	46.5	6.7
1977	64.7	6.4	69.3	6.6	65.2	6.4	73.2	4.1	43.6	13.8
1976	60.8	4.5	65.0	5.7	61.3	5.9	70.3	4.1	38.3	8.2
1975	58.2	10.6	61.5	7.9	57.9	15.8	67.5	9.2	35.4	17.6
1974	52.6	15.4	57.0	29.5	50.0	14.[illegible]	61.8	11.0	30.1	55.2
1973	45.6	9.1	44.0	7.6	43.7	3.3	55.7	3.5	19.4	13.5
1972	41.8	3.2	40.9	3.8	42.3	2.2	53.8	1.3	17.1	3.0
1971	40.5	3.1	39.4	1.8	41.4	3.5	53.1	2.3	16.6	8.5
1970	39.3	3.4	38.7	7.5	40.0	4.7	51.9	2.4	15.3	4.8
1969	38.0	3.8	36.0	5.9	38.2	3.2	50.7	2.0	14.6	2.1

	Coal		Gas Fuels		Electric Power		Crude Petroleum		Petroleum Products, Refined	
Year	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1989	**95.5**	**0.1**	**75.2**	**5.3**	**115.1**	**3.5**	**56.3**	**21.9**	**61.2**	**13.5**
1988	95.4	(1.8)	71.4	(3.6)	111.2	0.5	46.2	(16.8)	53.9	(5.1)
1987	97.1	(3.7)	74.1	(10.9)	110.6	(1.8)	55.5	18.3	56.8	6.8
1986	100.8	(1.4)	83.2	(15.7)	112.6	0.9	46.9	(44.5)	53.2	(36.1)
1985	102.2	0.0	98.7	(5.6)	111.6	3.1	84.5	(7.4)	83.2	(4.8)
1984	102.2	1.7	104.5	(3.3)	108.2	5.3	91.3	(1.7)	87.4	(2.8)
1983	100.5	0.5	108.1	8.1	102.8	2.8	92.9	(7.1)	89.9	(10.1)
1982	100.0	7.5	100.0	12.9	100.0	10.7	100.0	(8.8)	100.0	(5.6)
1981	93.0	6.4	88.6	23.6	90.3	14.2	109.6	44.4	105.9	19.5
1980	87.4	3.7	71.7	39.8	79.1	18.9	75.9	48.0	88.6	51.7
1979	84.3	4.9	51.3	27.0	66.5	8.0	51.3	25.4	58.4	38.4
1978	80.4	10.4	40.4	10.4	61.6	7.5	40.9	9.4	42.2	4.2
1977	72.8	5.7	36.6	35.6	57.3	12.1	37.4	8.1	40.5	11.6
1976	68.9	(4.6)	27.0	32.4	51.1	7.4	34.6	3.3	36.3	7.4
1975	72.2	16.1	20.4	33.3	47.6	18.7	33.5	15.9	33.8	15.4
1974	62.2	52.5	15.3	28.6	40.1	26.1	28.9	68.0	29.3	73.4
1973	40.8	12.7	11.9	10.2	31.8	6.4	17.2	11.0	16.9	18.2
1972	36.2	6.5	10.8	5.9	29.9	4.5	15.5	(0.6)	14.3	1.4
1971	34.0	21.0	10.2	4.1	28.6	9.6	15.6	7.6	14.1	6.0
1970	28.1	33.2	9.8	11.4	26.1	4.4	14.5	1.4	13.3	1.5
1969	21.1	8.8	8.8	1.1	25.0	0.8	14.3	4.4	13.1	1.6

Source: U.S. Department of Labor. Bureau of Labor Statistics. Producer Price Indexes.

TABLE 84

COST TRENDS OF ELECTRIC LIGHT AND POWER CONSTRUCTION*

BY GEOGRAPHIC DIVISIONS—1969-1990

1973 EQUALS 100

Date	North Atlantic	South Atlantic	North Central	South Central	Plateau	Pacific
Jan. 1, 1990	290	279	288	282	282	297
July 1, 1989	286	275	284	278	277	293
Jan. 1, 1989	280	268	278	274	272	288
July 1, 1988	273	263	274	269	270	282
Jan. 1, 1988	260	253	261	257	258	271
July 1, 1987	251	244	253	250	249	262
Jan. 1, 1987	249	242	250	249	248	259
July 1, 1986	249	243	250	249	249	260
Jan. 1, 1986	246	241	247	249	247	260
July 1, 1985	244	240	245	247	247	258
Jan. 1, 1985	243	241	245	249	248	258
July 1, 1984	239	237	241	246	248	259
Jan. 1, 1984	233	233	236	243	244	255
July 1, 1983	231	233	236	242	245	254
Jan. 1, 1983	226	230	231	239	240	250
July 1, 1982	222	227	229	234	236	247
Jan. 1, 1982	218	222	226	231	232	240
July 1, 1981	209	218	215	222	222	230
Jan. 1, 1981	203	210	208	214	216	225
July 1, 1980	193	197	196	203	202	209
Jan. 1, 1980	186	191	190	195	197	200
July 1, 1979	178	182	181	187	188	192
Jan. 1, 1979	168	174	173	178	179	181
July 1, 1978	161	165	165	169	170	173
Jan. 1, 1978	156	161	159	164	166	168
July 1, 1977	154	158	157	162	163	165
Jan. 1, 1977	147	152	149	155	155	157
July 1, 1976	145	148	146	151	152	151
Jan. 1, 1976	140	144	141	146	145	146
July 1, 1975	138	140	140	142	143	141
Jan. 1, 1975	130	133	132	134	133	132
July 1, 1974	119	120	120	122	120	120
Jan. 1, 1974	105	105	104	105	105	105
July 1, 1973	100	100	100	100	100	100
Jan. 1, 1973	95	96	96	95	96	96
July 1, 1972	93	94	94	93	94	94
Jan. 1, 1972	92	91	94	91	92	93
July 1, 1971	87	88	90	88	89	89
Jan. 1, 1971	83	84	86	85	85	85
July 1, 1970	80	81	83	83	82	82
Jan. 1, 1970	77	79	80	80	80	80
July 1, 1969	74	76	77	77	77	77
Jan. 1, 1969	72	73	74	74	74	74

Index numbers shown are a composite of over 50 material and labor items included in the Handy-Whitman Index service of cost indexes of construction and equipment, all steam.

Source: Handy-Whitman Index of Public Utility Construction Costs. Published by courtesy of Whitman, Requardt and Associates, Baltimore, Maryland.

TABLE 85

COST OF INDUSTRIAL PURCHASED ELECTRIC POWER AS A PERCENT OF VALUE OF PRODUCT SHIPMENT

U.S. AVERAGE 1981—1986

Standard Industrial Classification	Industry	1986	1985	1984	1983	1982	1981
20	Food and Kindred Products	0.9	0.9	0.9	0.9	0.8	0.8
21	Tobacco Manufacturers	0.4	0.4	0.4	0.4	0.4	0.4
22	Textile Mill Products	2.3	2.3	2.3	2.2	2.2	1.9
23	Apparel and Other Textile Products	0.7	0.7	0.7	0.7	0.7	0.7
24	Lumber and Wood Products	1.5	1.5	1.5	1.4	1.5	1.3
25	Furniture and Fixtures	0.9	0.9	0.9	0.9	0.9	0.9
26	Paper and Allied Products	3.9	4.1	3.9	4.1	3.8	3.6
27	Printing and Publishing	0.7	0.7	0.8	0.7	0.7	0.7
28	Chemicals and Allied Products	2.9	3.1	3.1	3.0	3.3	3.0
29	Petroleum and Coal Products	1.6	1.1	1.1	1.0	0.8	0.7
30	Rubber and Miscellaneous Plastics Products	2.1	2.1	2.0	2.1	2.1	2.0
31	Leather and Leather Products	0.8	0.8	0.8	0.8	0.7	0.7
32	Stone, Clay and Glass Products	2.8	2.9	2.9	2.9	2.9	2.7
33	Primary Metal Industries	4.5	4.7	4.8	4.6	4.6	3.8
34	Fabricated Metal Products	1.2	1.2	1.3	1.2	1.2	1.1
35	Machinery, Except Electrical	0.9	0.9	0.9	0.9	0.9	0.8
36	Electric and Electronic Equipment	1.0	1.0	1.0	1.0	1.0	1.0
37	Transportation Equipment	0.6	0.6	0.6	0.7	0.7	0.7
38	Instruments and Related Products	0.8	0.8	0.8	0.8	0.7	0.7
39	Miscellaneous Manufacturing Industries	0.8	0.8	0.9	0.9	0.8	0.8
	Total Manufacturing	1.5	1.5	1.5	1.5	1.5	1.4

Note: 1987 and 1988 data not available at time of printing.

Source: U.S. Department of Commerce. Bureau of the Census. Annual Survey of Manufactures. Statistics for Industry Groups and Industries.

TABLE 86

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE—TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND VOLTAGE GROUPS

	Circuit Miles		
State/Division	1989p	1988r	1987r
Total United States*	**627,390**	**623,300**	**618,521**
Maine	4,019	3,809	3,754
New Hampshire	2,372	2,319	2,333
Vermont	1,784	1,783	1,783
Massachusetts	6,060	6,051	6,017
Rhode Island	704	713	674
Connecticut	1,804	1,804	1,805
New England	**16,743**	**16,478**	**16,366**
New York	20,404	20,417	20,210
New Jersey	6,350	6,320	6,278
Pennsylvania	21,107	20,707	20,387
Middle Atlantic	**47,861**	**47,443**	**46,875**
Ohio	21,768	21,542	21,519
Indiana	15,074	15,060	15,006
Illinois	16,573	16,642	16,557
Michigan	18,157	18,080	18,068
Wisconsin	9,659	9,654	9,677
East North Central	**81,230**	**80,978**	**80,827**
Minnesota	10,061	10,081	10,098
Iowa	10,771	10,812	10,857
Missouri	12,351	12,231	12,144
North Dakota	7,050	7,060	7,018
South Dakota	6,892	6,880	6,929
Nebraska	13,710	13,765	13,710
Kansas	10,206	10,169	10,156
West North Central	**71,042**	**70,999**	**70,912**
Delaware	2,664	2,636	2,626
Maryland	8,531	8,655	8,666
District of Columbia	10	10	10
Virginia	12,903	12,798	12,713
West Virginia	8,389	8,320	8,226
North Carolina	24,355	24,141	23,946
South Carolina	20,532	20,351	19,955
Georgia	23,014	22,820	22,673
Florida	17,418	17,340	17,128
South Atlantic	**117,816**	**117,072**	**115,943**
Kentucky	11,997	11,954	11,913
Tennessee	28,771	28,726	28,725
Alabama	14,269	14,227	14,197
Mississippi	13,825	13,659	13,567
East South Central	**68,862**	**68,566**	**68,402**
Arkansas	7,375	7,376	7,239
Louisiana	11,937	11,842	11,875
Oklahoma	10,242	10,187	10,115
Texas	48,628	48,222	47,522
West South Central	**78,181**	**77,626**	**76,751**
Montana	10,841	10,803	10,422
Idaho	11,967	11,788	11,700
Wyoming	5,162	5,064	5,117
Colorado	7,277	7,213	7,097
New Mexico	7,471	7,349	7,230
Arizona	13,322	13,000	12,875
Utah	6,718	6,697	6,675
Nevada	8,252	8,208	8,075
Mountain	**71,009**	**70,120**	**69,192**
Washington	18,980	18,802	18,512
Oregon	11,319	11,679	11,653
California	42,201	41,386	40,949
Pacific	**72,500**	**71,867**	**71,113**
Alaska	674	674	672
Hawaii	1,473	1,478	1,468
Alaska & Hawaii	**2,146**	**2,151**	**2,140**

Nominal Voltage	Circuit Miles		
	1989p	1988r	1987r
Total	**627,390**	**623,300**	**618,521**
22,000- 30,000	92,060	90,613	89,232
31,000- 40,000	69,296	68,978	68,366
41,000- 50,000	36,380	37,086	37,181
51,000- 70,000	106,794	107,283	108,125
71,000-131,000	94,325	93,100	91,682
132,000-143,000	66,440	65,892	65,848
144,000-188,000	24,397	23,902	23,659
189,000-253,000	64,782	64,296	63,473
254,000-400,000	45,290	45,047	44,367
401,000-600,000	24,027	23,504	22,989
601,000-800,000	3,599	3,599	3,599

Note: Total may not equal sum of components due to independent rounding.

**Does not include the following miles of line operated by REA Cooperatives: 1989 and 1988—not available; 1987—71,804.*

p Preliminary. r Revised.

TABLE 87

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE—INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND VOLTAGE GROUPS

State/Division	Circuit Miles 1989p	Circuit Miles 1988r	Circuit Miles 1987r
Total United States	**493,409**	**490,235**	**487,395**
Maine	3,994	3,784	3,729
New Hampshire	2,372	2,319	2,333
Vermont	1,679	1,678	1,678
Massachusetts	5,928	5,919	5,885
Rhode Island	704	713	674
Connecticut	1,769	1,769	1,770
New England	**16,446**	**16,182**	**16,069**
New York	18,971	18,984	18,987
New Jersey	6,340	6,311	6,268
Pennsylvania	21,107	20,707	20,387
Middle Atlantic	**46,418**	**46,001**	**45,642**
Ohio	21,684	21,458	21,434
Indiana	14,926	14,912	14,885
Illinois	16,346	16,418	16,332
Michigan	17,961	17,897	17,877
Wisconsin	9,555	9,574	9,597
East North Central	**80,473**	**80,259**	**80,125**
Minnesota	9,685	9,714	9,726
Iowa	10,199	10,244	10,288
Missouri	11,023	10,969	10,925
North Dakota	5,006	5,006	4,997
South Dakota	3,500	3,498	3,514
Nebraska	95	95	94
Kansas	10,039	10,001	10,011
West North Central	**49,547**	**49,527**	**49,555**
Delaware	2,558	2,539	2,520
Maryland	8,528	8,652	8,663
District of Columbia	10	10	10
Virginia	11,882	11,743	11,656
West Virginia	8,389	8,320	8,226
North Carolina	23,323	23,123	22,990
South Carolina	16,915	16,773	16,521
Georgia	17,767	17,567	17,427
Florida	12,576	12,535	12,444
South Atlantic	**101,948**	**101,264**	**100,457**
Kentucky	8,026	7,972	7,931
Tennessee	250	248	246
Alabama	10,119	10,089	10,059
Mississippi	9,859	9,720	9,628
East South Central	**28,254**	**28,028**	**27,864**
Arkansas	6,761	6,761	6,624
Louisiana	11,736	11,641	11,675
Oklahoma	8,377	8,321	8,288
Texas	44,252	43,802	43,165
West South Central	**71,126**	**70,526**	**69,752**
Montana	7,993	7,979	8,013
Idaho	11,064	10,957	10,925
Wyoming	3,171	3,128	3,129
Colorado	4,656	4,596	4,560
New Mexico	7,187	7,065	7,038
Arizona	6,262	5,950	5,944
Utah	6,117	6,096	6,089
Nevada	6,990	6,970	6,837
Mountain	**53,439**	**52,750**	**52,534**
Washington	4,080	4,176	4,084
Oregon	5,792	6,143	6,141
California	34,354	33,840	33,648
Pacific	**44,225**	**44,160**	**43,871**
Alaska	60	60	58
Hawaii	1,473	1,478	1,468
Alaska & Hawaii	**1,533**	**1,538**	**1,526**

Nominal Voltage	Circuit Miles 1989p	Circuit Miles 1988r	Circuit Miles 1987r
Total	**493,409**	**490,235**	**487,395**
22,000- 30,000	60,098	58,746	57,635
31,000- 40,000	61,436	61,322	60,807
41,000- 50,000	32,000	32,617	32,731
51,000- 70,000	86,866	87,026	87,998
71,000-131,000	75,764	74,829	73,514
132,000-143,000	62,410	61,916	61,613
144,000-188,000	10,483	10,159	10,284
189,000-253,000	48,245	48,180	47,763
254,000-400,000	37,963	37,674	37,386
401,000-600,000	15,738	15,359	15,258
601,000-800,000	2,406	2,406	2,407

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 88

AVERAGE NUMBER OF EMPLOYEES INVESTOR-OWNED ELECTRIC UTILITIES

ELECTRIC DEPARTMENT

Year	Operation and Maintenance	Construction	Total
1989p	**424,002**	**94,582**	**518,584**
1988r	431,735	90,627	522,362
1987	425,076	98,792	523,868
1986	422,693	106,971	529,664
1985	403,497	121,006	524,503
1984	395,500	120,600	516,100
1983	397,800	115,400	513,200
1982	388,400	116,700	505,100
1981	375,900	114,600	490,500
1980	368,400	108,200	476,600
1979	356,200	106,800	463,000
1978	341,500	103,000	444,500
1977	326,800	99,700	426,500
1976	317,600	99,100	416,700
1975	310,500	101,000	411,500
1974	311,700	107,400	419,100
1973	307,200	107,900	415,100
1972	299,200	102,300	401,500
1971	295,200	98,500	393,700
1970	290,200	94,700	384,900
1969	282,600	89,900	372,500

p Preliminary. r Revised.

GLOSSARY

Allowance for Funds Used During Construction (AFUDC): An amount recorded by a company to represent the cost of those funds used to finance construction work in progress. See Glossary of Electric Utility Terms.

Capability: The maximum load which a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time, without exceeding approved limits of temperature and stress.

Capacity: The load for which a generating unit, generating station, or other electrical apparatus is rated either by the user or by the manufacturer. See also Name Plate Rating.

Capital Expenditures: Cost of construction of new utility plant (additions, betterments, and replacements) and expenditures for the purchase or acquisition of existing utility plant facilities.

Capitalization: The total of Long-Term Debt, Preferred Stock and Common Stock Equity. For balance sheet presentation, several modifications are sometimes made: current maturities of Long-Term Debt are not included in the Capitalization section, but Short-Term Debt (with an original maturity of less than one year) which will be refinanced by Long-Term Debt is sometimes included.

Class of Service: A group of customers with similar characteristics (i.e., residential, commercial, industrial, sales for resale, etc.) which are identified for the purpose of setting a rate for electric service.

Construction Expenditures: Expenditures (may or may not include Interest and/or Other Overheads Charged to Construction) for construction including additions to and betterments, renewals, and replacements of utility plant during a specific period, but not money spent for maintenance or for the acquisition of existing utility systems or segments.

Consumer Price Index (CPI): This index is issued by the U.S. Department of Labor, Bureau of Labor Statistics, as a measure of average changes in the retail prices of goods and services usually bought by two groups. The first group consists of the families of wage earners and clerical workers living in cities. The second group consists of all urban consumers.

Customers, Average: The arithmetic averages of month-end customers in each of 12 consecutive months. For those billed other than every month, the number of such customers is adjusted to a 12-month basis (e.g., for bimonthly billing the number of customers billed, or counted, in each month is multiplied by two and the resultant averaged for the 12-month period).

Demand: The rate at which electric energy is delivered to or by a system, part of a system, or a piece of equipment. It is expressed in kilowatts, kilovoltamperes or other suitable unit at a given instant or averaged over any designated period of time. The primary source of "Demand" is the power-consuming equipment of the customers.

Electric Generation—Net: Gross generation less kilowatthours consumed for generation station use.

Electric Utility Industry: All enterprises engaged in the production and/or distribution of electricity for use by the public, including:

Investor-Owned Electric Utilities organized as tax-paying business usually financed by the sale of securities, in the free market.

Cooperatively-Owned Utilities A group of persons who have organized a joint venture for the purpose of supplying electric energy to a specified area.

Government-Owned includes municipal systems, federal agencies, state projects, and public power districts, and, where the data are not separable, those industrial plants contributing to the public supply.

Expenses, Operating: A group of expenses applicable to utility operations composed of: Operation Expense, Maintenance Expense, Provisions for Depreciation and Amortization, Taxes Other Than Income Taxes, Income Taxes, Provisions for Deferred Income Taxes, Income Taxes Deferred in Prior Years—Credit, and Investment Tax Credit Adjustments—Net.

Fuels, Fossil: Any naturally occurring fuel of an organic nature, such as coal, crude oil, and natural gas.

Industrial Electric Power: Electric generating stations operated by Industrial establishments.

Load Factor: The ratio of the average load in kilowatts supplied during a designated period to the peak or maximum load in kilowatts occurring in that period. Load factor, in percent, also may be derived by multiplying the kilowatthours in the period by 100 and dividing by the product of the maximum demand in kilowatts and the number of hours in the period.

Margin, Percent Capacity: The difference between capability and peak load divided by the capability times 100. Should not be confused with Percent Reserve Margin in which the difference is divided by the peak load.

Name Plate Rating: The full-load continuous rating of a generator, prime mover or other electrical equipment under specified conditions as designated by the manufacturer.

Output, Weekly Electric: The sum of the system output of all investor-owned utilities, rural electric cooperatives, and government power projects in the contiguous United States adjusted for all inter-utility deliveries.

Peak Load: See Demand—The greatest demand which occurs during a specified period of time.

Prime Mover: The engine, turbine, water wheel, or similar machine which drives an electric generator.

Producers Price Index: Formerly known as the wholesale price index, this index is the oldest continuous statistical series published by BLS. It is designed to measure average changes in prices of all commodities, at all stages of processing, produced or imported for sale in primary markets in the U.S.

Revenue, Average: Revenue from the sale of electricity (exclusive or forfeited discounts and penalties) for a particular class of service divided by the corresponding number of kilowatthours sold.

Utility Plant, Electric: All equipment used for the generation, transmission, and distribution of electricity, or an account in which record is kept of this equipment. Includes plant in service, purchased or sold, in process of reclassification, leased to others, held for future use, and under construction, and acquisition adjustments and adjustment accounts, without deduction of Accumulated Provision for Depreciation and Amortization.

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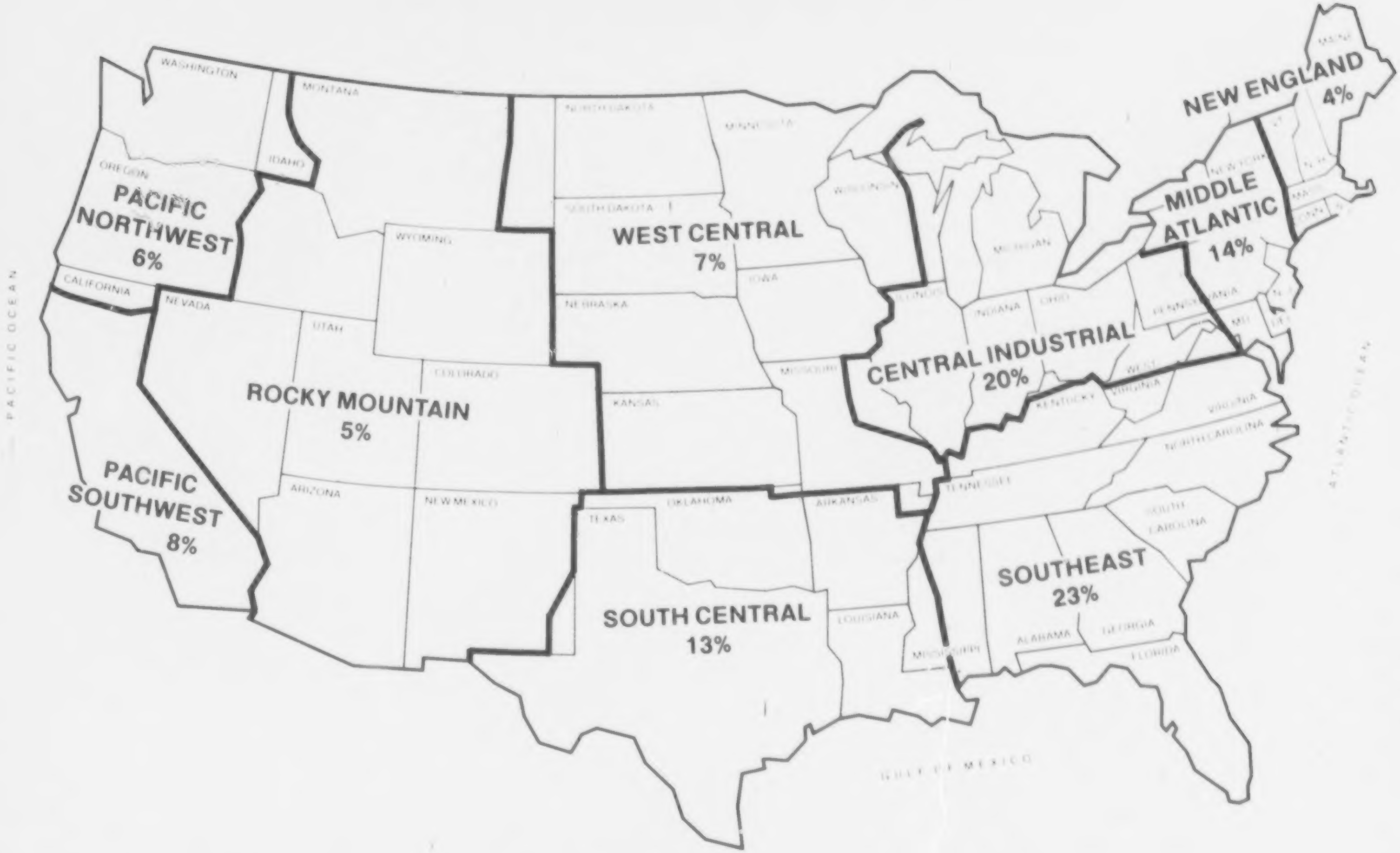
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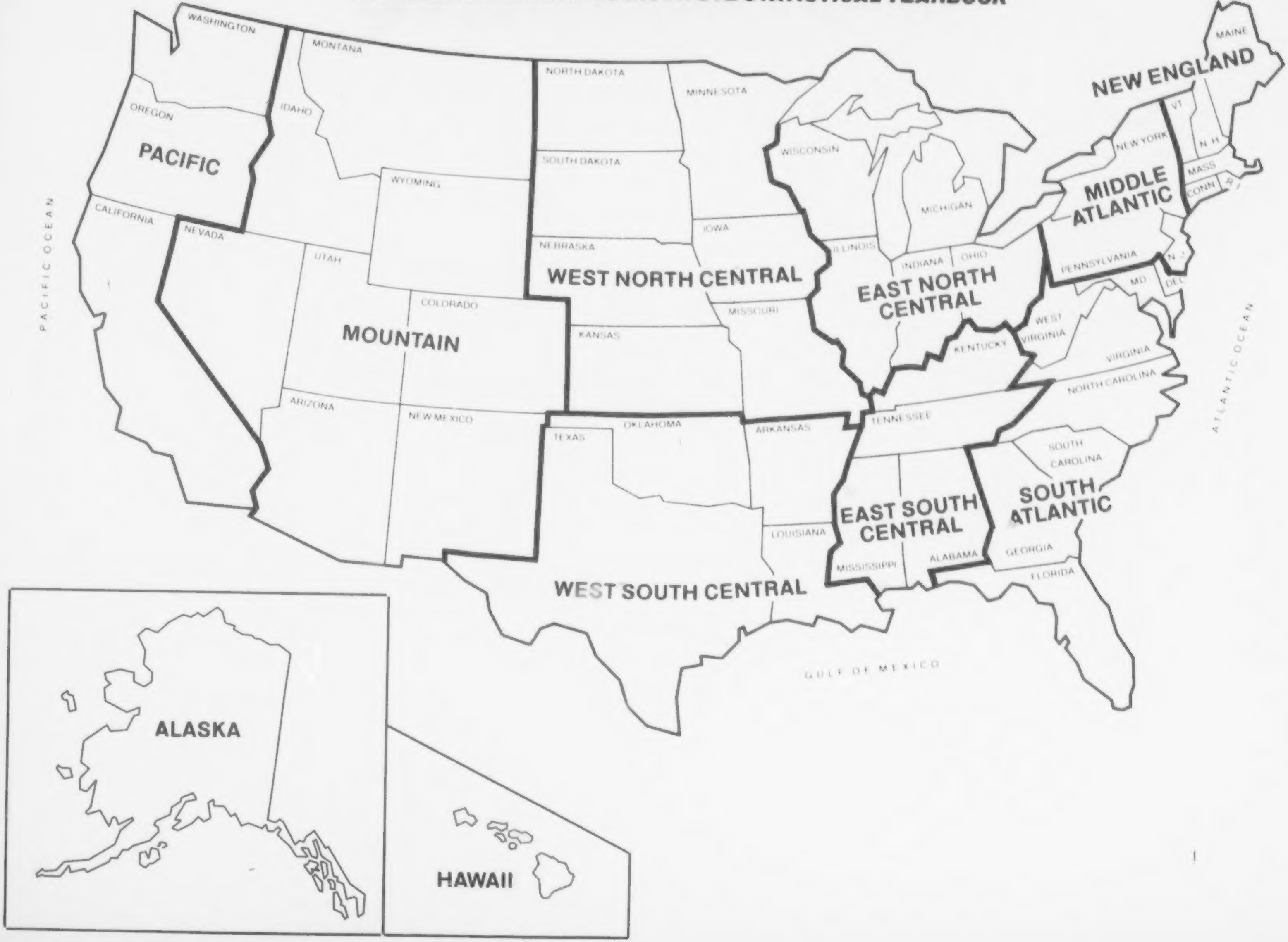

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